Morgan State University

School of Graduate Studies Catalog

2006-2009

Provisions of this publication are not to be regarded as a contract between the student and Morgan State University.

Changes are effected from time to time in the general regulations and in the academic requirements. There are established procedures for making changes and procedures which protect the institution’s integrity and welfare. A curriculum or graduation requirement, when altered, is not made retroactive unless the alteration can be accommodated within the span of years required for graduation. Additionally, because of space limitations in limited enrollment programs, Morgan State University may not be able to offer admission to all qualified students applying to these programs and/or class-sections.
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MESSAGE FROM THE DEAN

Thank you for choosing Morgan State University as the place where you will pursue your graduate studies. The University offers a comprehensive range of academic programs leading to doctorate and master’s degrees. The knowledge and skills that you will acquire while pursuing graduate studies taught by the excellent graduate faculty at Morgan will enable you to compete successfully in academia, business, industry, non profit organizations as well as in other private and public arenas.

Morgan is a major center for quality instruction and research, and its research programs offer both basic and applied research. The excellent graduate faculty is diverse in its composition, which ensures your exposure to a variety of theories and research methods. Advanced technological capabilities exist in the facilities throughout the campus. You will find that pursuing graduate studies at Maryland’s Public Urban University has numerous unique advantages. In addition to using the Baltimore-Washington Metropolitan area as a living laboratory, you may conduct research at an abundance of libraries, archives, and museums, and enjoy numerous opportunities for professional contacts with legislators, business executives, health services personnel, and successful alumni.

This Graduate Catalog has been prepared to answer many of your questions and, generally, to set forth the professional expectations of the School of Graduate Studies. I encourage you to consult the School of Graduate Studies website at http://www.morgan.edu/academics/Grad-Studies/ for additional information about programs and services for graduate students.

As Dean, I want to congratulate you on choosing to continue your education. Everyone in the Office of the School of Graduate Studies is eager to assist you in the pursuit of your professional and academic goals.
MORGAN STATE UNIVERSITY GRADUATE STUDIES

COMMUNICATING WITH THE UNIVERSITY

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BY FAX
(443) 885-8226

BY TELEPHONE

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Accounts Receivable (443) 885-367
Admission, Graduate (443) 885-3185
Bear Necessity (443) 885-4045
Bookstore (443) 885-3075
Bursar (443) 885-3108
Counseling Center (443) 885-3130
Financial Aid (443) 885-3170
Health Services-Student (443) 885-3236

Human Resources (443) 885-3195
Information (443) 885-3102
International Student’s Office (443) 885-3078
Library (443) 885-3477
Student Center (443) 885-3120
Police & Public Safety (443) 885-3100
Post Office (443) 885-3234
Records & Registration (443) 885-3300
Veterans Affairs (443) 885-3300

(For a more comprehensive list of numbers, see the University’s Telephone Directory)
UNIVERSITY COMMUNICATIONS WITH STUDENTS

YOUR OFFICIAL EMAIL ACCOUNT

Upon admission to Morgan State University, all students, graduate and undergraduate, are assigned an email account. Your email account is a means by which administrators, faculty, and staff communicate official University information to you. For example, your email account may be used to inform you of the following:

Matters concerning your financial aid, such as
  • incomplete or erroneous FASFA forms
  • refunds due to you

Matters concerning your account with the Bursar, such as
  • bills that you may owe to Morgan
  • credit placed on your account

Matters concerning Academic and/or Student Affairs, such as
  • school closings
  • campus emergencies
  • events in the Student Union or Fine Arts Center
  • problems concerning your borrowing privileges at Soper Library

Additionally, the Office of Residence Life, the offices of your school/college dean and your department chairperson, the Honors Program, the Counseling Center, as well as the Office of the Dean of the School of Graduate Studies may use your University email account to communicate important information to you.

Your email address is your “Username” i.e., <<Email>> @mymail.morgan.edu. Typically your email address is formed by using your last name and the initial of your first name @mymail.morgan.edu. When more than one student has the same last name and first name initial, the email address is formed by using the last name and the initials of the first and middle names @mymail.morgan.edu. Activate your email account by logging on to http://webmail.morgan.edu. Your initial password is your pin number (typically your birth date).

For the security of your email communications, you are strongly encouraged to follow the instructions on the webmail website and change your initial password (i.e., pin number). For assistance in accessing your email account, contact the University’s Help Desk at 443-885-HELP (4357). You may be able to retain your email account even after graduating from Morgan State University.
UNIVERSITY STATEMENT OF MISSION

Morgan State University is a historically black institution with the unique designation as Maryland’s public urban university. As an urban university, Morgan serves an ethnically and culturally diverse student body, among which are some of Maryland’s best and brightest students as well as representative numbers of high school graduates from urban communities who would not otherwise pursue the baccalaureate degree. Similarly, the student body reflects the traditional college-going cohort as well as part-time and adult learners.

The University’s curricula are designed to meet the educational needs of city residents and the needs of the city and the state for professionals trained in a variety of areas. Academic offerings consist of major programs in the arts and humanities, the social sciences, science, engineering, education, business, and a selected number of professional areas. A major focus of the curriculum is on the social, economic, and political characteristics of the city so that the capacity to understand urban life and phenomena is a central part of the education of the students. Also, the comprehensiveness of Morgan’s programs reflects the commitment of the University to have major impact upon the problem of the under-representation of blacks and other minorities in the professional labor force within the city, state, and nation.

Consistent with the diversity of the student body, the University has as supplements to the standard curriculum an honors program for high academic achievers and a network of academic enrichment programs, academic advising and counseling services for students needing special assistance. Also, it employs a variety of methodologies, pedagogic approaches, and delivery systems, which facilitate achievement among traditional and nontraditional students, at on-campus and off-campus sites.

The research program of the University involves both basic and applied research. Because of the urban emphasis, however, a substantial amount of research is focused on urban life and phenomena with a bent toward education, service and public policy development. The research is oftentimes oriented toward specific urban problems and issues, such as human resource development, economic development and competitiveness, health care, environment, transportation, aging, and substance abuse.

In fulfilling its service function, Morgan is committed to serving the professional communities represented by its academic programs, while also assisting local government, local businesses and community groups in addressing the problems they face in urban Baltimore. Special attention is given to in-service training for public school teachers and enrichment programs and counseling services for students who would not otherwise have an opportunity for pursuing college study. Likewise, the University seeks to promote economic development through its partnerships with business and industry and its focus on minority business development. Finally, Morgan serves as an important cultural and intellectual center for a major segment of the community and contributes much to improving the quality of life for citizens throughout the Greater Baltimore Community.

*Abridged version of Mission Statement as approved by the Maryland Higher Education Commission, June 27, 1990.*
# Morgan State University Graduate Academic Calendar

## 2006 – 2008 Academic Calendar*

*The dates and times in this Graduate Catalog’s Academic Calendars are tentative and subject to change without notice. Students are encouraged to consult the current course scheduling guide for information regarding amendments to this academic calendar.

### FALL 2006 Semester

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AUGUST 2006</strong></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Friday Deadline for payment of fees for Fall 2006</td>
</tr>
<tr>
<td>16-17</td>
<td>Wednesday- Thursday FACULTY INSTITUTE</td>
</tr>
<tr>
<td>18</td>
<td>Faculty Institute School/Department meetings</td>
</tr>
<tr>
<td>20-25</td>
<td>Residence halls open for Fall 2006 new students</td>
</tr>
<tr>
<td>21-Sept. 6</td>
<td>Introduction to University III</td>
</tr>
<tr>
<td>24</td>
<td>LATE REGISTRATION/DROP-ADD</td>
</tr>
<tr>
<td>25</td>
<td>This is the Registration Period for all students</td>
</tr>
<tr>
<td>28 – Sept. 1</td>
<td>Registration Period for all students who did not register Spring 2006</td>
</tr>
<tr>
<td>28</td>
<td>Residence halls open for Fall 2006 returning students</td>
</tr>
<tr>
<td>31</td>
<td>Tuition Waiver Registration</td>
</tr>
<tr>
<td><strong>SEPTEMBER 2006</strong></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Monday – Friday Drop/Add Period</td>
</tr>
<tr>
<td>2</td>
<td>FALL 2006 CLASSES BEGIN</td>
</tr>
<tr>
<td>4</td>
<td>Undergraduate Department meetings with new students</td>
</tr>
<tr>
<td>8</td>
<td>Course Schedules due for Spring and Winter semesters 2007</td>
</tr>
<tr>
<td>14</td>
<td>MATRICULATION CONVOCATION</td>
</tr>
<tr>
<td>16</td>
<td>New Graduate Student Orientation Day</td>
</tr>
<tr>
<td>18</td>
<td>Speech Proficiency Examination Registration Begins (CC 104)</td>
</tr>
<tr>
<td>27</td>
<td>Lat day to register for Writing Proficiency Examination (HO 202)</td>
</tr>
<tr>
<td>29</td>
<td>Last Day to Register for Graduate Comprehensive Examinations to be given by November 4, 2006</td>
</tr>
<tr>
<td><strong>OCTOBER 2006</strong></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>WRITING PROFICIENCY EXAMINATION (HO 202)</td>
</tr>
</tbody>
</table>
6 Friday Last day to submit Undergraduate and Graduate Application for May 2007 Commencement
7-14 Saturday-Sunday Mid-Semester Examinations
11 Wednesday Annual Career Day
13 Friday – Saturday Semester Weekend University Mid-Semester Examinations
14 Saturday Final Examinations – Weekend University I HOMECOMING
16 Monday Career Development fall recruiting begins
17 Tuesday Deadline for Faculty Input of Mid-Semester Grades
19 Thursday PERFORMING ARTS CONVOCATION
23-Nov. 17 Advisement Days – Registration for Spring 2007
27 Friday Dissertations and Theses are due in Graduate School for graduation clearance in Fall 2006
28 Saturday Weekend University Session II begins

**NOVEMBER 2006**

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Wednesday</td>
<td>Last day for submission of graduate Admission application for Spring 2007</td>
</tr>
<tr>
<td>1-17</td>
<td></td>
<td>Advisement Days – Registration for continuing students (continued)</td>
</tr>
<tr>
<td>1</td>
<td>Wednesday</td>
<td><strong>Last Day to Drop Undergraduate and Graduate Classes</strong></td>
</tr>
<tr>
<td>2</td>
<td>Thursday</td>
<td>University Career Day by Schools</td>
</tr>
<tr>
<td>3</td>
<td>Friday</td>
<td>Admissions Open House</td>
</tr>
<tr>
<td>4</td>
<td>Saturday</td>
<td><strong>Graduate Comprehensive Examinations</strong></td>
</tr>
<tr>
<td>9</td>
<td>Thursday</td>
<td>FOUNDERS DAY CONVOCATION (11:00 A. M.)</td>
</tr>
<tr>
<td>20-29</td>
<td></td>
<td>Early Registration for Winter 2007 Minimester</td>
</tr>
<tr>
<td>22</td>
<td>Wednesday</td>
<td>Thanksgiving Recess begins after last Scheduled class</td>
</tr>
<tr>
<td>23-25</td>
<td>Thursday</td>
<td>THANKSGIVING – University Holiday</td>
</tr>
<tr>
<td>27</td>
<td>Monday</td>
<td>Classes resume after Thanksgiving recess</td>
</tr>
</tbody>
</table>

**DECEMBER 2006**

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Thursday</td>
<td>BILL OF RIGHTS CONVOCATION (11:A.M.)</td>
</tr>
<tr>
<td>8</td>
<td>Friday</td>
<td><strong>Last day for undergraduate classes</strong></td>
</tr>
<tr>
<td>9</td>
<td>Saturday</td>
<td>Reading day (Weekend University Classes Meet)</td>
</tr>
<tr>
<td>11-18</td>
<td>Monday – Monday</td>
<td>Undergraduate and Graduate Final Examinations – Faculty input of grades due 48 hours after the examination is given</td>
</tr>
<tr>
<td>13</td>
<td>Wednesday</td>
<td>Last Day for payment of Tuition and Fees for Winter 2007 Minimester</td>
</tr>
<tr>
<td>15</td>
<td>Friday</td>
<td>Last day for submission of undergraduate admission application for Spring 2007</td>
</tr>
</tbody>
</table>
### MORGAN STATE UNIVERSITY GRADUATE ACADEMIC CALENDAR

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-16</td>
<td>Friday</td>
<td>Weekend University Final Examinations - Faculty input of grades due 48 hours after the examination is given</td>
</tr>
<tr>
<td>16</td>
<td>Saturday</td>
<td>Weekend University Session II Officially Ends</td>
</tr>
<tr>
<td>18</td>
<td>Monday</td>
<td>Last Day for Payment of Tuition and Fees for Spring 2006 Semester</td>
</tr>
<tr>
<td>19</td>
<td>Tuesday</td>
<td>Residence halls close for Fall 2006 Semester</td>
</tr>
<tr>
<td>20</td>
<td>Wednesday</td>
<td>Deadline for Faculty Input of First Semester Final Grades</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Last day to remove “I” grades for Spring</td>
</tr>
<tr>
<td>2006</td>
<td></td>
<td>FALL 2006 SEMESTER ENDS</td>
</tr>
</tbody>
</table>

### WINTER 2007 MINIESTER

#### JANUARY 2007

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Tuesday</td>
<td>Residence halls open for 2007 Minimester</td>
</tr>
<tr>
<td>15</td>
<td>Monday</td>
<td>2007 Minimester Last Registration (Drop/Add); Martin Luther King, Jr. Holiday – UNIVERSITY HOLIDAY</td>
</tr>
<tr>
<td>19</td>
<td>Friday</td>
<td>2007 Minimester Classes End</td>
</tr>
<tr>
<td>23</td>
<td>Tuesday</td>
<td>2007 Minimester Final Examinations</td>
</tr>
<tr>
<td>24</td>
<td>Wednesday</td>
<td>Residence halls close for 2007 Minimester – Faculty Input of 2007 Minimester Final Grades</td>
</tr>
</tbody>
</table>

### SPRING 2007 SEMESTER

#### JANUARY 2007

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-11</td>
<td>Wednesday</td>
<td>Faculty Institute</td>
</tr>
<tr>
<td>12</td>
<td>Friday</td>
<td>School/Department meetings</td>
</tr>
<tr>
<td>14</td>
<td>Sunday</td>
<td>Residence halls open – New students Spring 2007</td>
</tr>
<tr>
<td>15</td>
<td>Monday</td>
<td>MARTIN LUTHER KING, JR. HOLIDAY</td>
</tr>
<tr>
<td>16-23</td>
<td>Tuesday – Tuesday</td>
<td>Introduction to University Week</td>
</tr>
<tr>
<td>19</td>
<td>Friday</td>
<td>Tuition Waiver Registration</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Last day to apply for Graduate Comprehensive Examination to be administered by March 3, 2007</td>
</tr>
<tr>
<td>23</td>
<td>Tuesday</td>
<td>ALL CLASSES BEGIN</td>
</tr>
<tr>
<td>23-29</td>
<td>Tuesday-Monday</td>
<td>DROP-ADD PERIOD</td>
</tr>
<tr>
<td>26</td>
<td>Friday</td>
<td>Career Development recruitment for graduation seniors begins</td>
</tr>
<tr>
<td>27</td>
<td>Saturday</td>
<td>Semester Weekend University classes begin</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Weekend University I classes begin</td>
</tr>
</tbody>
</table>
29 Monday Registration for Speech Proficiency Examination begins (CC 104) Last day to drop with grade of “W”

FEBRUARY 2007

1 Thursday Last day to file complete applications for admission and financial aid to Graduate School for Fall 2007

1 Thursday MITCHELL – QUARLES CONVOCATION (11: A.M.)

5 Monday Career Development Spring recruiting begins

9 Friday Course schedules due for 2007 Fall and Summer Sessions 1 & 2

22 Thursday FREDERICK DOUGLASS CONVOCATION (11:00 A.M.) Last day to register for Writing Proficiency Examination (HO 202)

23 Friday Last day to file complete applications for admission to Graduate School, Summer 2007

MARCH 2007

1 Thursday Writing Proficiency Examination (HO 202)

3 Saturday Graduate Comprehensive Examinations

8 Thursday WOMEN’S HISTORY CONVOCATION (11:00 A.M.)

12-17 Monday – Saturday Mid-Semester Examination

16 Friday Dissertations and Theses due in Graduate School for graduation clearance in Spring 2007

16-17 Friday – Saturday Mid-Term Examinations Semester Weekend University

17 Saturday Weekend University I ends

19-24 Monday – Saturday SPRING BREAK

20 Tuesday Deadline for faculty input of mid-semester grades

26 Monday Classes resume after Spring Break

26-April 14 Monday – Saturday ADVISEMENT DAYS – Students must meet with advisors to review progress and prepare Fall 2007 schedule

27-June 29 Rolling Registration for Fall 2007 Semester

29 Thursday LAST DAY TO DROP UNDERGRADUATE AND GRADUATE CLASSES

30 Friday Last day to submit completer financial aid application to receive priority

31 Saturday Weekend University II begins
<table>
<thead>
<tr>
<th>Date Range</th>
<th>Event Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-June 29</td>
<td>Rolling Registration for Fall 2007</td>
</tr>
<tr>
<td>2-April 14</td>
<td>ADVISEMENT DAYS – Students must meet with advisors to review progress and prepare Fall 2007 schedule</td>
</tr>
<tr>
<td>5</td>
<td>Thursday HONORS CONVOCATION (11:00 A.M.)</td>
</tr>
<tr>
<td>13-18</td>
<td>Friday – Wednesday ROTC Week</td>
</tr>
<tr>
<td>18-May 4</td>
<td>Registration for Summer 2007 Sessions (continuing students)</td>
</tr>
<tr>
<td>19</td>
<td>Thursday ROTC Awards Day (11:00 a.m.)</td>
</tr>
<tr>
<td>20</td>
<td>Friday I Love Morgan Day Career Development Spring recruiting ends</td>
</tr>
<tr>
<td>30-May 5</td>
<td>Monday – Saturday Final Examinations for prospective May graduates</td>
</tr>
<tr>
<td>1-4</td>
<td>Tuesday – Friday Registration for Summer 2007 Sessions (all students)</td>
</tr>
<tr>
<td>1-5</td>
<td>Tuesday – Saturday Final Examination for prospective May graduates</td>
</tr>
<tr>
<td>7</td>
<td>Monday Deadline for Faculty Input of Final Grades Prospective 2007 GRADUATES (This includes removal of “I” grades from Fall 2006) Last day for submission of undergraduate admission application for Fall 2007</td>
</tr>
<tr>
<td>9</td>
<td>Wednesday LAST DAY FOR ALL SPRING 2007 CLASSES</td>
</tr>
<tr>
<td>10</td>
<td>Thursday Reading Day</td>
</tr>
<tr>
<td>11-18</td>
<td>Friday – Friday Final Examinations - Faculty input of grades due 48 hours after the examination is given Weekend University Final Examinations</td>
</tr>
<tr>
<td>18-19</td>
<td>Friday – Saturday</td>
</tr>
<tr>
<td>19</td>
<td>Saturday Residence Halls Close for Spring 2007 Weekend University II ends Faculty input of grades due 48 hours after the examination is given</td>
</tr>
<tr>
<td>20</td>
<td>Sunday COMMENCEMENT</td>
</tr>
<tr>
<td>22</td>
<td>Tuesday Deadline for faculty input of Spring 2007 final grades</td>
</tr>
<tr>
<td>23</td>
<td>Wednesday Spring 2007 Semester Ends</td>
</tr>
<tr>
<td>25</td>
<td>Friday Last day to submit application for graduation for all candidates graduation in December 2007</td>
</tr>
</tbody>
</table>
### SUMMER 2007 SESSIONS

#### SUMMER 2007 SESSION I

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-30</td>
<td>Wednesday – Monday</td>
<td>Early Registration (Sessions I and II) for Continuing Students</td>
</tr>
<tr>
<td>MAY 2007</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-4</td>
<td>Tuesday – Friday</td>
<td>Early Registration (Sessions I and II) for all students</td>
</tr>
<tr>
<td>16</td>
<td>Wednesday</td>
<td>Payment due for Early Registration for Session I and Session II</td>
</tr>
<tr>
<td>22</td>
<td>Tuesday</td>
<td>Residence Halls Open for Summer 2007 Session I</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Registration (10:00 a.m. – 7:00 p.m.)</td>
</tr>
<tr>
<td>23</td>
<td>Wednesday</td>
<td>Registration (10:00 a.m. – 4:00 p.m.)</td>
</tr>
<tr>
<td>23</td>
<td>Wednesday</td>
<td>Classes Begin – Summer Session I</td>
</tr>
<tr>
<td>24</td>
<td>Thursday</td>
<td>Late Registration; Drop/Add (10:00 a.m. – 4:00 p.m.)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tuition Waiver Registration</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PAYMENT DUE FOR SESSION I</td>
</tr>
<tr>
<td>25</td>
<td>Friday</td>
<td>Last Day to Add Classes for Summer Session I</td>
</tr>
<tr>
<td>28</td>
<td>Monday</td>
<td>Memorial Day – University Holiday</td>
</tr>
<tr>
<td>JUNE 2007</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Monday</td>
<td>Last Day to Drop Classes for Session I</td>
</tr>
<tr>
<td>7</td>
<td>Thursday</td>
<td>Last Day to Register for Writing Proficiency Examination</td>
</tr>
<tr>
<td>14</td>
<td>Thursday</td>
<td>Writing Proficiency Examination 9:00 a.m. (HO 202)</td>
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<tr>
<td>21</td>
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<td>Registration for Summer Session II</td>
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<td>10:00 a.m. – 7:00 p.m.</td>
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<tr>
<td>22</td>
<td>Friday</td>
<td>Registration for Summer Session II</td>
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<tr>
<td></td>
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<td>10:00 a.m. – 4:00 p.m.</td>
</tr>
<tr>
<td>27</td>
<td>Wednesday</td>
<td>Last Day of Classes for Summer Session I</td>
</tr>
<tr>
<td>28-29</td>
<td>Thursday – Friday</td>
<td>Final Examinations for Summer Session I</td>
</tr>
<tr>
<td></td>
<td>Saturday</td>
<td>Residence halls close for Summer Session I</td>
</tr>
<tr>
<td>JULY 2007</td>
<td></td>
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<tr>
<td>3</td>
<td>Tuesday</td>
<td>Deadline for faculty input of Final Grades for Summer Session I</td>
</tr>
<tr>
<td>4</td>
<td>Wednesday</td>
<td>Independence Day – University Holiday</td>
</tr>
<tr>
<td>Date</td>
<td>Day</td>
<td>Event</td>
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<td>21</td>
<td>Thursday</td>
<td>Registration 10:00 a.m. – 7:00 p.m.</td>
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<tr>
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<td>Friday</td>
<td>Registration 10:00 a.m. – 4:00 p.m.</td>
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<td>2</td>
<td>Monday</td>
<td>Residence hall opens for Summer Session II</td>
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<tr>
<td></td>
<td></td>
<td>Late Registration; Drop/Add</td>
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<tr>
<td></td>
<td></td>
<td>10:00 a.m. – 6:00 p.m.</td>
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<tr>
<td>3</td>
<td>Tuesday</td>
<td>Classes begin for Summer Session II</td>
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<tr>
<td></td>
<td></td>
<td>Late Registration; Drop/Add</td>
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<tr>
<td></td>
<td></td>
<td>10:00 a.m. – 6:00 p.m.</td>
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<tr>
<td></td>
<td></td>
<td>Tuition Waiver Registration</td>
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<tr>
<td>4</td>
<td>Wednesday</td>
<td>Independence Day – University Holiday</td>
</tr>
<tr>
<td>7-11</td>
<td>Saturday – Wednesday</td>
<td>Introduction to University I</td>
</tr>
<tr>
<td>10</td>
<td>Tuesday</td>
<td>Last Day to Add Classes for Summer Session II</td>
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<tr>
<td>13</td>
<td>Friday</td>
<td>Last Day to Drop Classes for Summer Session II</td>
</tr>
<tr>
<td>14-18</td>
<td>Saturday – Wednesday</td>
<td>Introduction to University II</td>
</tr>
<tr>
<td>AUGUST 2007</td>
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<tr>
<td>7</td>
<td>Tuesday</td>
<td>Last Day of Classes for Summer Session II</td>
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<tr>
<td>8-9</td>
<td>Wednesday – Thursday</td>
<td>Final Examinations for Summer Session II</td>
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<tr>
<td>10</td>
<td>Friday</td>
<td>Residence halls close for Summer Session II</td>
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<tr>
<td>13</td>
<td>Monday</td>
<td>Deadline for Faculty Input of Final Grades for Summer Session II</td>
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<td>Summer Session II ends</td>
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### FALL 2007 SEMESTER

#### AUGUST 2007

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<td>15-16</td>
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<td>19-24</td>
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<td>23</td>
<td>Thursday</td>
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<tr>
<td>24</td>
<td>Friday</td>
</tr>
<tr>
<td>27</td>
<td><strong>Monday</strong></td>
</tr>
<tr>
<td>27-31</td>
<td>Monday – Friday</td>
</tr>
<tr>
<td>30</td>
<td>Thursday</td>
</tr>
<tr>
<td>31</td>
<td>Friday</td>
</tr>
</tbody>
</table>

**Deadline for payment of fees for Fall 2007**

- FACULTY INSTITUTE
- School/Departmental meetings
- Residence halls open for Fall 2007 new students
- Introduction to University III
- LATE REGISTRATION
- This is the Registration Period for all students who did not register Spring 2007
- Residence halls open for Fall 2007 returning students
- Tuition Waiver Registration

#### SEPTEMBER 2007

<table>
<thead>
<tr>
<th>Date</th>
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<tbody>
<tr>
<td>3</td>
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<tr>
<td>4-5</td>
<td>Tuesday – Wednesday</td>
</tr>
<tr>
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<td>Wednesday</td>
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<td>7</td>
<td><strong>Friday</strong></td>
</tr>
<tr>
<td>13</td>
<td>Thursday</td>
</tr>
<tr>
<td>15</td>
<td><strong>Saturday</strong></td>
</tr>
<tr>
<td>17</td>
<td>Monday</td>
</tr>
<tr>
<td>26</td>
<td>Wednesday</td>
</tr>
</tbody>
</table>

**LABOR DAY – University Holiday**

- LATE REGISTRATION/DROP-ADD continued
- Senior registration for Career Development’s campus recruiting program begins
- Course schedules due for 2008 spring and winter semesters
- MATRICULATION CONVOCATION (11:00 A.M.)
- New Graduate Student Orientation Day
- Speech Proficiency Examination Registration Begins (CC 204)
- Last day to register for Writing Proficiency Examination (HO 202)
MORGAN STATE UNIVERSITY GRADUATE ACADEMIC CALENDAR

28 Friday

Last Day to register for fall semester comprehensive Examinations to be given by November 3, 2007

OCTOBER 2007

4 Thursday

WRITING PROFICIENCY EXAMINATION
(HO 202)

5 Friday

Last day to submit Undergraduate and Graduate Application for May 2008 Commencement

8-13 Saturday-Saturday

Mid-Semester Examinations

10 Wednesday

Annual Career Day

12-13 Friday-Saturday

Weekend University Mid-Semester Examination

13 Saturday

HOMECOMING

15 Monday

Career Development fall recruiting begins

16 Tuesday

Deadline for Faculty Input of Mid-Semester Grades

18 Thursday

PERFORMING ARTS CONVOCATION

22-Nov. 16

Advisement Days

26 Friday

Dissertations and theses due in Graduate School

27 Saturday

Weekend University Session II begins

NOVEMBER 2007

1 Thursday

Last day for submission of graduate admission application for Spring 2008

1-16 Advisement Days – Registration for continuing students (continued)

1 Thursday

LAST DAY TO DROP GRADUATE AND UNDERGRADUATE CLASSES

2 Friday Admissions Open House

3 Saturday Graduate Comprehensive Examinations

8 Thursday FOUNDER'S DAY CONVOCATION (11:00 A.M.)

19-28 Early Registration for Winter 2008 Minimester

21 Wednesday Thanksgiving Recess begins after last scheduled class

22-24 Thursday-Saturday THANKSGIVING – University Holiday

26 Monday Classes resume after Thanksgiving recess
## DECEMBER 2007

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
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<tbody>
<tr>
<td>6</td>
<td>Thursday</td>
<td>BILL OF RIGHTS CONVOCATION (11:00 A.M.)</td>
</tr>
<tr>
<td>7</td>
<td>Friday</td>
<td>Last day for graduate and undergraduate classes Career Development</td>
</tr>
<tr>
<td></td>
<td></td>
<td>fall recruiting ends Reading day (Weekend University Classes Meet)</td>
</tr>
<tr>
<td>8</td>
<td>Saturday</td>
<td>Undergraduate and Graduate Final Examinations – Faculty input of</td>
</tr>
<tr>
<td></td>
<td></td>
<td>grades due</td>
</tr>
<tr>
<td>10-17</td>
<td>Monday –Monday</td>
<td>Undergraduate and Graduate Final Examinations – Faculty input of grades due</td>
</tr>
<tr>
<td>12</td>
<td>Wednesday</td>
<td>Last Day for payment of Tuition and Fees for Winter 2008 Minimester</td>
</tr>
<tr>
<td>14</td>
<td>Friday</td>
<td>Last day for submission of undergraduate admission application for spring 2008</td>
</tr>
<tr>
<td>14-15</td>
<td>Friday –Saturday</td>
<td>Weekend University Final Examinations Weekend University Session II Officially Ends</td>
</tr>
<tr>
<td>15</td>
<td>Saturday</td>
<td>Last Day for Payment of Tuition and Fees for Spring 2008 Semester</td>
</tr>
<tr>
<td>17</td>
<td>Monday</td>
<td>Deadline for Faculty Input of First Semester Final Grades</td>
</tr>
<tr>
<td>18</td>
<td>Tuesday</td>
<td>Deadline for Faculty Input of First Semester Final Grades</td>
</tr>
<tr>
<td>19</td>
<td>Wednesday</td>
<td>Deadline for Faculty Input of First Semester Final Grades</td>
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## WINTER 2008 MINIMESTER

### JANUARY 2008

<table>
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<th>Date</th>
<th>Day</th>
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<tbody>
<tr>
<td>2</td>
<td>Wednesday</td>
<td>Residence halls open for 2008 Minimester</td>
</tr>
<tr>
<td>2</td>
<td>Wednesday</td>
<td>2008 Minimester Classes Begin</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2008 Minimester Late Registration (Drop/Add)</td>
</tr>
<tr>
<td>18</td>
<td>Friday</td>
<td>Martin Luther King, Jr. Holiday</td>
</tr>
<tr>
<td>21</td>
<td>Monday</td>
<td>2008 Minimester Final Examinations</td>
</tr>
<tr>
<td>22</td>
<td>Tuesday</td>
<td>Residence hall close for 2008 Minimester</td>
</tr>
<tr>
<td>24</td>
<td>Thursday</td>
<td>Faculty Input of 2008 Minimester Final Grades</td>
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## SPRING 2008 SEMESTER

### JANUARY 2008

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<tr>
<th>Date</th>
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</thead>
<tbody>
<tr>
<td>9-10</td>
<td>Wednesday-Thursday</td>
<td>Faculty Institute</td>
</tr>
<tr>
<td>11</td>
<td>Friday</td>
<td>School/Department meetings</td>
</tr>
<tr>
<td>13</td>
<td>Sunday</td>
<td>Residence halls open – New students</td>
</tr>
<tr>
<td>13-18</td>
<td>Sunday-Friday</td>
<td>Spring 2008</td>
</tr>
<tr>
<td>15-23</td>
<td>Tuesday-Wednesday</td>
<td>Introduction to University Week</td>
</tr>
<tr>
<td>18</td>
<td>Friday</td>
<td>LATE REGISTRATION</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tuition Waiver Registration</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Last day to apply for Graduate Comprehensive Examinations to be</td>
</tr>
<tr>
<td></td>
<td></td>
<td>administered by March 1, 2008</td>
</tr>
<tr>
<td>21</td>
<td>Monday</td>
<td>MARTIN LUTHER KING, JR. HOLIDAY</td>
</tr>
<tr>
<td>23</td>
<td>Wednesday</td>
<td>ALL CLASSES BEGIN</td>
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# Morgan State University Graduate Academic Calendar

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<tr>
<th>Date</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>23-29</td>
<td>Wednesday- Tuesday LATE REGISTRATION DROP/ADD PERIOD Career Development recruitment for graduating seniors begins</td>
</tr>
<tr>
<td>25</td>
<td>Friday CLASSES BEGIN for Weekend University</td>
</tr>
<tr>
<td>28</td>
<td>Monday Registration for Speech Proficiency Examination begins (CC 204)</td>
</tr>
<tr>
<td>29</td>
<td>Tuesday Last day to drop without a grade of “W”</td>
</tr>
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</table>

## February 2008

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Friday Last day to file complete applications for admission and financial aid to Graduate School for Fall 2008</td>
</tr>
<tr>
<td>4</td>
<td>Monday Career Development spring recruiting begins</td>
</tr>
<tr>
<td>7</td>
<td>Thursday MITCHELL – QUARLES CONVOCATION (11:00 A.M.)</td>
</tr>
<tr>
<td>8</td>
<td>Friday Course schedules due for 2008 fall semester and summer sessions 1 &amp; 2</td>
</tr>
<tr>
<td>21</td>
<td>Thursday FREDERICK DOUGLASS CONVOCATION (11:00 A.M.) Last day to register for the Writing Proficiency Examination (HO 202)</td>
</tr>
<tr>
<td>22</td>
<td>Friday Last day to file complete applications for admission to Graduate School, Summer 2008</td>
</tr>
</tbody>
</table>

## March 2008

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Saturday Graduate Comprehensive Examinations</td>
</tr>
<tr>
<td>6</td>
<td>Thursday Writing Proficiency Examination (HO 202)</td>
</tr>
<tr>
<td>13</td>
<td>Thursday WOMAN’S HISTORY CONVOCATION (11:00 A.M.)</td>
</tr>
<tr>
<td>17-22</td>
<td>Monday –Saturday Mid-Semester Examinations</td>
</tr>
<tr>
<td>21</td>
<td>Friday Dissertations and Theses due in Graduate School for graduation clearance in Spring 2008</td>
</tr>
<tr>
<td>25</td>
<td>Tuesday Deadline for faculty input of mid-semester grades</td>
</tr>
<tr>
<td>24-29</td>
<td>Monday-Saturday Spring Break</td>
</tr>
<tr>
<td>31</td>
<td>Monday Classes resume after Spring Break Last day to submit complete financial aid application to receive priority.</td>
</tr>
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## April 2008

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>1 – April 14</td>
<td>ADVISEMENT DAYS – Students must meet with advisors to review progress and prepare Fall 2008 schedule</td>
</tr>
<tr>
<td>2</td>
<td>Wednesday LAST DAY TO DROP UNDERGRADUATE</td>
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</table>
### AND GRADUATE CLASSES

- **1-June 27**: Thursday
  
- **3-11-16**: Friday-Wednesday
  
- **16-May 2**: Thursday
  
- **18-23 – May 9**: Wednesday – Friday
  
- **28-May 3**: Monday – Saturday

#### MAY 2008

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<tbody>
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<td>1-2</td>
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**SUMMER 2008 SESSIONS**

#### SUMMER 2008 SESSION I

**APRIL 2008**

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<thead>
<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>16-30</td>
<td>Early Registration for Continuing Students</td>
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**MAY 2008**

<table>
<thead>
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<tbody>
<tr>
<td>1-2</td>
<td>Thursday – Friday</td>
</tr>
<tr>
<td>14</td>
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<td>Payment due for Early Registration for summer session I and II</td>
</tr>
<tr>
<td>Date</td>
<td>Day</td>
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<tr>
<td>20</td>
<td>Tuesday</td>
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<td>26-27</td>
<td>Thursday-Friday</td>
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<td>JULY 2008</td>
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<td>SUMMER 2008 SESSION II</td>
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<td>JUNE 2008</td>
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<td>19</td>
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<tr>
<td>JULY 2008</td>
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<tr>
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<td>Tuesday</td>
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<td>5-9</td>
<td>Saturday-Wednesday</td>
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</tr>
<tr>
<td>8</td>
<td>Tuesday</td>
</tr>
<tr>
<td>11</td>
<td>Friday</td>
</tr>
<tr>
<td>12-16</td>
<td>Saturday-Wednesday</td>
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**AUGUST 2008**

<table>
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<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Tuesday</td>
<td>Last Day of Classes for Summer Session II</td>
</tr>
<tr>
<td>6-7</td>
<td>Wednesday – Thursday</td>
<td>Final Examinations for Summer Session II</td>
</tr>
<tr>
<td>8</td>
<td>Friday</td>
<td>Residence halls close for Summer Session II</td>
</tr>
<tr>
<td>11</td>
<td>Monday</td>
<td>Deadline for Faculty Input of Final Grades for Summer Session II</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Summer Session II Ends</td>
</tr>
</tbody>
</table>
# 2008 – 2009 ACADEMIC CALENDAR*

*The dates and times in this Graduate Catalog’s Academic Calendars are tentative and subject to change without notice. Students are encouraged to consult the current course scheduling guide for information regarding amendments to this academic calendar.

## FALL 2008 SEMESTER

### AUGUST 2008

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Deadline for payment of Fees for Fall 2008 FACULTY INSTITUTE</td>
</tr>
<tr>
<td>20-21</td>
<td>Faculty Institute</td>
</tr>
<tr>
<td>22</td>
<td>School/Departmental meetings</td>
</tr>
<tr>
<td>24-29</td>
<td>Residence halls open for Fall 2008 new students Introduction to University III LATE REGISTRATION</td>
</tr>
<tr>
<td>25 – Sept. 2</td>
<td>This is the Registration Period for all students who did not Register Spring 2008</td>
</tr>
<tr>
<td>28</td>
<td>Residence halls open for Fall 2008 returning students Tuition Waiver Registration</td>
</tr>
<tr>
<td>29</td>
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</table>

### SEPTEMBER 2008

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Labor Day – University Holiday</td>
</tr>
<tr>
<td>2</td>
<td>Fall 2008 Classes Begin DROP/ADD Period Undergraduate Department meetings with new students</td>
</tr>
<tr>
<td>2-8</td>
<td>Course schedules are due for spring and winter semesters 2009</td>
</tr>
<tr>
<td>4</td>
<td>Weekend University Session I begins</td>
</tr>
<tr>
<td>5</td>
<td>MATRICULATION CONVOCATION (11:00)</td>
</tr>
<tr>
<td>20</td>
<td>New Graduate Student Orientation Day</td>
</tr>
<tr>
<td>22</td>
<td>Speech Proficiency Examination Registration Begins (Communication Studies Department Office) Last day to register for Writing Proficiency Examination (HO 202)</td>
</tr>
<tr>
<td>24</td>
<td>Last Day to Register for fall Graduate Comprehensive Examinations to be given by November 1, 2008</td>
</tr>
<tr>
<td>26</td>
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</tbody>
</table>

### OCTOBER 2008

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Writing Proficiency Examination (HO 202) Last day to submit Undergraduate and Graduate Application for May 2009 Commencement</td>
</tr>
<tr>
<td>3</td>
<td>Annual Career Day Homecoming</td>
</tr>
<tr>
<td>8</td>
<td>Performing Arts Convocation</td>
</tr>
<tr>
<td>11</td>
<td>Career Development fall recruiting begins</td>
</tr>
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<td>16</td>
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<tr>
<td>20</td>
<td></td>
</tr>
</tbody>
</table>

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## MORGAN STATE UNIVERSITY GRADUATE ACADEMIC CALENDAR

### 20 – Nov. 21
- **Monday – Saturday**: Advisement Days
- **Tuesday**: Registration for Spring 2009
- **Friday – Saturday**: Mid-Semester Examinations
- **Deadline for Faculty Input of Mid-Semester Grades**
- **24-25**: Weekend University Mid-Semester Examinations
- **28**: Dissertation and Theses due in Graduate School for graduation clearance in Fall 2008
- **25**: Weekend University Session II begins

### NOVEMBER 2008
- **1 Saturday**: Graduate Comprehensive Examinations
- **1-21 students**: Advisement Days – Registration for continuing students
- **6 Thursday**: Last day for submission of graduate admission application for Spring 2009
- **7 Friday**: University Career Day by SchoolsAdmissions Open House
- **13 Thursday**: Founders Day CONVOCATION (11:00 A.M.)
- **17-26**: Early Registration for Winter 2009 Minimester
- **26 Wednesday**: Thanksgiving Recess begins after last scheduled class
- **27-29**: Thanksgiving – University Holiday

### GRADUATE CLASSES
- **7 Friday**: University Career Day by SchoolsAdmissions Open House
- **13 Thursday**: Founders Day CONVOCATION (11:00 A.M.)
- **26 Wednesday**: Thanksgiving Recess begins after last scheduled class
- **27-29**: THANKSGIVING – University Holiday

### DECEMBER 2008
- **1 Monday**: Classes resume after Thanksgiving Recess
- **4 Thursday**: BILL OF RIGHTS CONVOCATION (11:00)
- **Friday**: Last day for graduate and undergraduate classes Career Development fall recruiting ends Reading day (Weekend University Classes Meet)
- **13 Saturday**: Undergraduate and Graduate Final Examinations – Faculty input of grades due 48 hours after the examination is given
- **17 Wednesday**: Last Day for payment of Tuition and Fees For Winter 2009 Minimester
- **19 Friday**: Last day for submission of undergraduate admission Application for Spring 2009
- **19-20 Friday – Saturday**: Weekend University Final Examinations Faculty Input of Grades Due 48 hours after examinations
- **20 Saturday**: Weekend University Session II Officially Ends
- **22 Monday**: Last Day for Payment of Tuition and fees for Spring 2008 Semester
- **23 Tuesday**: Residence halls close for Fall 2008 Semester
### WINTER 2009 MINIESTER

**JANUARY 2009**

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Monday</td>
<td>Residence halls open for 2009 Minimester</td>
</tr>
<tr>
<td>2</td>
<td>Monday</td>
<td>2009 Minimester Classes Begin</td>
</tr>
<tr>
<td>19</td>
<td>Monday</td>
<td>2009 Minimester Late Registration (Drop/Add)</td>
</tr>
<tr>
<td>22</td>
<td>Thursday</td>
<td>MARTIN LUTHER KING, JR. HOLIDAY – UNIVERSITY HOLIDAY</td>
</tr>
<tr>
<td>23</td>
<td>Friday</td>
<td>2009 Minimester Classes End</td>
</tr>
<tr>
<td>26</td>
<td>Monday</td>
<td>2009 Minimester Final Examinations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Residence halls close for 2009 Minimester</td>
</tr>
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### SPRING 2009 SEMESTER

**JANUARY 2009**

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
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<tbody>
<tr>
<td>14-15</td>
<td>Wednesday – Thursday</td>
<td>Faculty Institute</td>
</tr>
<tr>
<td>16</td>
<td>Friday</td>
<td>School/Department meetings</td>
</tr>
<tr>
<td>18</td>
<td>Sunday</td>
<td>Residence halls open – new students Spring 2009</td>
</tr>
<tr>
<td>18-23</td>
<td>Sunday-Friday</td>
<td>Introduction to University Week</td>
</tr>
<tr>
<td>19</td>
<td>Monday</td>
<td>MARTIN LUTHER KING, JR. HOLIDAY – UNIVERSITY HOLIDAY</td>
</tr>
<tr>
<td>20-27</td>
<td>Tuesday-Tuesday</td>
<td>LATE REGISTRATION</td>
</tr>
<tr>
<td>23</td>
<td>Friday</td>
<td>Tuition Waiver Registration</td>
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**FEBRUARY 2009**

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<th>Date</th>
<th>Day</th>
<th>Event</th>
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<tbody>
<tr>
<td>2</td>
<td>Monday</td>
<td>Registration for Speech Proficiency Examination begins (Communication Studies Department Office)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Career Development spring recruiting begins</td>
</tr>
<tr>
<td>5</td>
<td>Thursday</td>
<td>MITCHELL – QUARLES CONVOCATION (11:00 A.M.)</td>
</tr>
<tr>
<td>6</td>
<td>Friday</td>
<td>Last day to file complete applications for admission and financial aid to Graduate School for Fall 2009</td>
</tr>
</tbody>
</table>
MORGAN STATE UNIVERSITY GRADUATE ACADEMIC CALENDAR

Course schedules due for 2009 Fall semester and summer sessions 1 & 2

19 Thursday FREDERICK DOUGLASS CONVOCATION (11:00 A.M.)
27 Friday Last day to file complete applications for admission to Graduate School, Summer 2009

MARCH 2009

5 Thursday Writing Proficiency Examination (HO 202)
7 Saturday Graduate Comprehensive Examinations
12 Thursday WOMEN'S HISTORY CONVOCATION (11:00)
16-21 Monday – Saturday Mid-Semester Examinations
20 Friday Dissertations and Theses due in Graduate School for graduation clearance in Spring 2009

23-28 Monday – Saturday Spring Break
24 Tuesday Deadline for faculty input of mid-semester grades
30 Monday Classes resume after Spring Break

30- April 17

APRIL 2009

1 – April 17 Advisement Days – Students must meet with advisors to review progress and prepare Fall 2009 Schedule

1-June 22 Registration for Fall 2009 Semester
8 Thursday HONORS CONVOCATION (11:00)

8 Wednesday LAST DAY TO DROP UNDERGRADUATE AND GRADUATE CLASSES

10-15 Friday-Wednesday ROTC Week
15 – May 1 Registration for Summer 2009 Sessions
16 Thursday ROTC Awards Day (11:00)
17 Friday I Love Morgan Day
22 – May 6 Wednesday – Wednesday Registration for Summer 2009 Sessions I & II
27-May 2 Monday – Saturday Final Examinations for prospective May 2009 graduates

MAY 2009

1-6 Friday - Wednesday Registration of Summer 2009 Sessions I & II
1-2 Friday – Saturday Final Examinations for prospective May 2009 Graduates
### MORGAN STATE UNIVERSITY GRADUATE ACADEMIC CALENDAR

<table>
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<th>Day</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>4</td>
<td>Monday</td>
<td>Deadline for Faculty Input of Final Grades for Prospective 2009 GRADUATES (This includes removal of “I” grades from Fall 2008)</td>
</tr>
<tr>
<td>11</td>
<td>Monday</td>
<td>LAST DAY FOR ALL SPRING 2009 CLASSES</td>
</tr>
<tr>
<td>12</td>
<td>Tuesday</td>
<td>Reading Day</td>
</tr>
<tr>
<td>13-20</td>
<td>Wednesday-Wednesday</td>
<td>Final Examinations – Faculty input of final grades due 48 hours after the examination is given</td>
</tr>
<tr>
<td>15-16</td>
<td>Friday – Saturday</td>
<td>Weekend University Final Examinations</td>
</tr>
<tr>
<td>17</td>
<td>Sunday</td>
<td>COMMENCEMENT</td>
</tr>
<tr>
<td>21</td>
<td>Thursday</td>
<td>Residence Halls Close for Spring 2009 Faculty Input of Final Grades due 48 hours after exam is given</td>
</tr>
<tr>
<td>22</td>
<td>Friday</td>
<td>Deadline for faculty input of Spring 2009 final grades Spring 2009 Semester Ends</td>
</tr>
<tr>
<td>29</td>
<td>Friday</td>
<td>Last day to submit application for graduation for all candidates graduating in December 2009</td>
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### SUMMER 2009 SESSIONS

#### SUMMER 2009 SESSIONS I

**APRIL 2009**

15-30 Early Registration for Continuing Students

**MAY 2009**

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<th>Event</th>
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<tr>
<td>1</td>
<td>Friday</td>
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<tr>
<td>13</td>
<td>Wednesday</td>
<td>Payment due for Early Registration for Summer Session I and Session II</td>
</tr>
<tr>
<td>21</td>
<td>Thursday</td>
<td>Residence Halls Open for Summer 2009 Session I Classes Begin – Summer Session I Registration (10:00 a.m. – 7:00 p.m.)</td>
</tr>
<tr>
<td>22</td>
<td>Friday</td>
<td>Tuition Waiver Registration</td>
</tr>
<tr>
<td>25</td>
<td>Monday</td>
<td>MEMORIAL DAY – UNIVERSITY HOLIDAY</td>
</tr>
<tr>
<td>26</td>
<td>Tuesday</td>
<td>Late Registration; Drop/Add (10:00 a.m. – 4:00 p.m.) PAYMENT DUE FOR SESSION I</td>
</tr>
<tr>
<td>29</td>
<td>Friday</td>
<td>Last Day to Add Classes for Summer Session I</td>
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**JUNE 2009**

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<tr>
<td>4</td>
<td>Thursday</td>
<td>Last Day to Register for Writing Proficiency Examination</td>
</tr>
<tr>
<td>8</td>
<td>Monday</td>
<td>Last Day to Drop Classes for Summer Session I</td>
</tr>
<tr>
<td>Date</td>
<td>Day</td>
<td>Event</td>
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</tr>
<tr>
<td>11 Thursday</td>
<td>Writing Proficiency Examination 9:00 a.m. (HO 202)</td>
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<tr>
<td>18 Thursday</td>
<td>Registration for Summer Session II (10:00 a.m. – 7:00 p.m.)</td>
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<tr>
<td>19 Friday</td>
<td>Registration for Summer Session II (10:00 a.m. – 4:00 p.m.)</td>
<td></td>
</tr>
<tr>
<td>26 Friday</td>
<td>Last Day of Classes for Summer Session I</td>
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<tr>
<td>29-30 Monday – Tuesday</td>
<td>Final Examinations for Summer Session I</td>
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</tr>
<tr>
<td>30 Tuesday</td>
<td>Residence halls close for Summer Session I</td>
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**JULY 2009**

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<tbody>
<tr>
<td>1 Wednesday</td>
<td>Deadline for faculty input of Final Grades for Summer Session I</td>
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<tr>
<td></td>
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<td>Summer Session I Ends</td>
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**SUMMER 2009 SESSION II**

**JUNE 2009**

<table>
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<th>Event</th>
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<tr>
<td>18 Thursday</td>
<td>Registration (10:00 a.m. – 7:00 p.m.)</td>
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</tr>
<tr>
<td>19 Friday</td>
<td>Registration (10:00 a.m. – 4:00 p.m.)</td>
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**JULY 2009**

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<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
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<tbody>
<tr>
<td>1 Wednesday</td>
<td>Residence halls open for Summer Session II</td>
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<tr>
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<td>Late Registration; Drop/Add (10:00 a.m. – 6:00 p.m.)</td>
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<tr>
<td>2 Thursday</td>
<td>Classes begin for Summer Session II</td>
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</tr>
<tr>
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<td>Late Registration; Drop/Add (10:00 a.m. – 6:00 p.m.)</td>
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</tr>
<tr>
<td></td>
<td>Tuition Waiver Registration</td>
<td></td>
</tr>
<tr>
<td>3* Friday</td>
<td>INDEPENDENCE DAY – UNIVERSITY HOLIDAY</td>
<td></td>
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<tr>
<td></td>
<td><em>(See 5 U.S.C. 6103(b).)</em></td>
<td></td>
</tr>
<tr>
<td>9 Thursday</td>
<td>Last Day to Add Classes for Summer Session II</td>
<td></td>
</tr>
<tr>
<td>10 Friday</td>
<td>Last Day to Drop Classes for Summer Session II</td>
<td></td>
</tr>
<tr>
<td>11-15 Saturday-Wednesday</td>
<td>Introduction to University I</td>
<td></td>
</tr>
<tr>
<td>18-22 Saturday-Wednesday</td>
<td>Introduction to University II</td>
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</tr>
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**AUGUST 2009**

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 Thursday</td>
<td>Last Day of Classes for Summer Session II</td>
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</tr>
<tr>
<td>7 Friday</td>
<td>Final Examinations for Summer Session II</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Residence halls close for Summer Session II</td>
<td></td>
</tr>
<tr>
<td>10 Monday</td>
<td>Deadline for Faculty Input of Final Grades for Summer Session II</td>
<td></td>
</tr>
<tr>
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<td>Summer Session II Ends</td>
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</table>
MISSION STATEMENT

Morgan State University (MSU), a historically black institution, has the unique designation as Maryland’s Public Urban University. To support the goals of Morgan State University, the mission of the Center for Continuing and Professional Studies is to serve the lifelong educational needs of traditional and non-traditional students pursuing undergraduate, graduate, professional, and personal growth aspirations. The Center coordinates a broad variety of educational activities and community services for learners from the culturally diverse population of Baltimore City, the State of Maryland, nationally, and internationally.

GUIDING PRINCIPLES

The Center for Continuing and Professional Studies serves as a primary contributor to Morgan’s community outreach initiatives. Extended weekend and evening courses provide educational opportunities for the traditional and non-traditional population. Successful Continuing and Professional Studies programs maximize academic/university resources as well as external partnerships with institutions of higher education. Cultural diversity is valued and viewed as a resource for learning. The Center for Continuing and Professional Studies uses various technological formats to meet the global demands of adult learners.

GRADUATE CERTIFICATE PROGRAMS

Whether preparing for career changes or seeking advancement in current positions, Morgan State University’s graduate certificate programs can greatly enhance your career prospects. Graduate certificates are designed to provide students with an opportunity for graduate education in specific areas of study. The purpose of a graduate certificate is to enhance marketability, increase special skills, acquired knowledge, and provide educational opportunities and continuing education through short term graduate programs. Certificate programs provide certification of specializations for individuals who already possess a bachelor’s degree.

PROFESSIONAL DEVELOPMENT PROGRAMS

Professional development is an ongoing process for individuals who desire to achieve a successful and rewarding career. The Center has instituted a number of professional development programs with academic departments to address the needs of individuals seeking career development and enhancement through extended learning opportunities. The programs include a variety of options for learning through workshops, short-term institutes, seminars, symposia, and conferences. As such, professionals will benefit from an in-depth concentration of study.

GRADUATE SCHOOL PREPARATORY COURSES FOR GMAT, GRE AND LSAT

Graduate programs usually require at least one graduate admission exam. It is important to allow ample time to prepare for and take the exams needed for admission. The Center for Continuing and Professional Studies offers a variety of services to assist students in preparing for and taking standardized admission examinations. This component provides preparatory courses that include practice tests and learning strategies necessary to master the exams. The preparatory courses are focused on the GMAT, GRE, and LSAT Exams. These preparatory courses are offered on Saturday mornings. Contact the Center for a schedule of course offerings and registration materials.
TOEFL® iBT (Test of English as a Foreign Language)
Developed by the Educational Testing Service (ETS), the Test of English as a Foreign Language (TOEFL® iBT) reflects the academic English used in higher education and is the first large-scale English proficiency assessment to be delivered over the Internet. The new test focuses on integrated communications skills and communicative competence. Interested students can find out more information and register for the exam through The Center for Continuing and Professional Studies.

CONTINUING EDUCATION UNITS/ CREDITS (CEU/CRs)
Morgan State University, as an accredited academic institution, offers Continuing Education Units/Credits (CEUs/CRs) through the Center for Continuing and Professional Studies. The Center is the authorized unit at Morgan State University responsible for awarding, administering and reviewing CEUs/CRs procedures to ensure compliance with established criteria. The Continuing Education Unit/Credit is a uniform unit of measure to record participation in non-credit academic, professional and vocational programs. The Center also sponsors activities for CEUs/CRs for university departments, organizations in the Baltimore community, the State of Maryland, and nation-wide.

INSTITUTE FOR URBAN RESEARCH

Mission Statement
The Institute for Urban Research at Morgan State University was established in 1978 under the provisions of the Maryland State Legislature to operate as a component of the School of Graduate Studies and Research.

The Institute engages in many forms of action research, academic and community service activities. It provides technical assistance to Morgan State University and the Baltimore urban community. It also allows research opportunities for faculty and students of Morgan State University.

The Institute for Urban Research is the primary social science research and training arm of Morgan State University. The Institute has a core staff of experienced researchers who seek to improve the response of governmental, non-governmental, private, and other institutions to the challenges of poverty, unemployment, poor health, truancy, and other urban and regional problems.

Through its Community Development Resource Center, Family Life Center, and Survey Research Center, the Institute provides a wide range of research and outreach services that include technical assistance to community-based agencies in Baltimore and Central Maryland.

The Institute provides many opportunities for students to develop research skills. Graduate students may participate in the IUR through stipends, internships, and research assistantships. The IUR also assists faculty in preparing grant proposals, designing research studies, and analyzing research data.
SCHOOL OF GRADUATE STUDIES

ACADEMIC DEGREE PROGRAMS

The School of Graduate Studies offers programs leading to the following degrees:

DOCTOR OF PHILOSOPHY (Ph.D.)
- Bioenvironmental Science
- Business Administration
- English
- Higher Education
- History
- Psychometrics
- Social Work

DOCTOR OF EDUCATION (Ed.D.)
- Higher Education (Community College Leadership)
- Mathematics Education
- Science Education
- Urban Educational Leadership

DOCTOR OF ENGINEERING (D.Eng.)

DOCTOR OF PUBLIC HEALTH (Dr.P.H.)

MASTER'S DEGREE PROGRAMS

CLARENCE M. MITCHELL SCHOOL OF ENGINEERING
- Master of Engineering (M.E.)
  - Civil
  - Electrical
  - Industrial
- Master of Science in Transportation Studies (M.S.)

COLLEGE OF LIBERAL ARTS
- Master of Arts - African American Studies (M.A.)
- Master of Arts - Economics (M.A.)
- Master of Arts - English (M.A.)
- Master of Arts - History (M.A.)
- Master of Arts - International Studies (M.A.)
- Master of Arts - Music (Choral Conducting, Musicology) (M.A.)
- Master of Arts - Sociology (M.A./M.S.)
- Master of Science – Psychometrics (M.S.)
- Master of Science - Telecommunications Management (M.S.)

EARL G. GRAVES SCHOOL OF BUSINESS & MANAGEMENT
- Master of Business Administration (M.B.A.)
  - Finance
  - Information Systems
  - Management
  - General
ACADEMIC DEGREE PROGRAMS

INSTITUTE OF ARCHITECTURE & PLANNING
Master of Architecture (M.Arch)
Master of City & Regional Planning (M.C.R.P.)
Master of Landscape Architecture (M.L.A.)
Master of Science in Landscape Architecture (M.S.L.A.)

PUBLIC HEALTH PROGRAM
Master of Public Health (M.P.H.)

SCHOOL OF COMPUTER, MATHEMATICAL, & NATURAL SCIENCES
Master of Arts in Mathematics (M.A.)
Master of Science in Bioinformatics (M.S.)
Master of Science in Science (M.S.)
Biology
Chemistry
Physics

SCHOOL OF EDUCATION
Master of Arts in Teaching (M.A.T.)
Master of Science - Educational Administration & Supervision (M.S.)
Master of Science - Elementary and Middle School Education (M.S.)
Master of Science - Mathematics Education (M.S.)
Master of Science - Science Education (M.S.)
Masters of Social Work – Social Work (M.S.W.)
Educational Administration & Supervision Certification Program
ACCREDITATIONS & CERTIFICATION
AACSB-The International Association for Management Education
American Chemical Society
American Dietetic Association
American Institute of CPAs
American Society of Landscape Architects
American Society of Women Accountants
Council on Social Work Education
Financial Executive Institute
Maryland Association of CPAs
Maryland Society of Accountants
Maryland State Department of Education (MSDE)
Middle States Association of Colleges and Secondary Schools
Middle States Commission on Higher Education
National Accreditation Agency for Clinical Laboratory Services (Medical Technology)
National Architectural Accreditation Board
National Council for Accreditation of Teacher Education (NCATE)
Planning Accreditation Board
World Trade Center Institute

MEMBERSHIPS
American Association of Colleges for Teacher Education (AACTE)
American Public Transit Association
Association of Collegiate Schools of Architecture
Association of Collegiate Schools of Planning
Association of International Educators (NAFSA)
American Society for Engineering Education
Conference of Minority Transportation Officials
Conference of Southern Graduate Schools
Council of Educators in Landscape Architecture
Council of Graduate Schools
Council of Historically Black Graduate Schools
Council of University Transportation Officials
Maryland Association of Colleges for Teacher Education (MACTE)
National Association for Equal Opportunity in Higher Education (NAFEO)
National Association of Graduate Admissions Professionals (NAGAP)
Northeast Association of Graduate Schools
Transportation Research Board
CRITERIA FOR ADMISSION

Admission to graduate study is open to qualified applicants regardless of race, color, religion, national and ethnic origin. The minimum criteria for admission are specified below. Meeting the minimum admission criteria, however, does not guarantee acceptance into a degree program, nor acceptance in the School of Graduate Studies. Additional requirements may be found in the respective degree programs listed in the Academic Programs section of this catalog. In order to be officially admitted, applicants must receive a letter signed by the Dean of the School of Graduate Studies informing them of their unconditional or conditional admission.

To be eligible for admission to the School of Graduate Studies, regardless of degree program, an applicant must:

- Have earned a bachelor’s degree from a regionally accredited college or university.
- Possess an undergraduate cumulative grade point average G.P.A. of 3.0 or better from all colleges and universities attended to be considered for unconditional admission. Students who possess a cumulative undergraduate G.P.A. of between a 2.5 and 2.9 may be considered for conditional admission. Post-bachelor’s undergraduate credits cannot be used to enhance G.P.A. requirements for admission to graduate study.
- Have satisfactorily completed certain minimum course work in designated areas depending on the discipline/program to which the student seeks admission. The specific courses and amount of work depends upon the field of study that the student proposes to enter.
- Submit an application for admission together with official copies of transcripts from all graduate and undergraduate institutions attended.
- Provide test scores (for those programs requiring them) on the Graduate Management Admissions Test (GMAT), the Graduate Record Examination (GRE), or the Miller Analogies Test (MAT). Test scores may not be more than 5 years old prior to the date of application.
- Have three letters of recommendation sent to the Dean of the School of Graduate Studies from officials or faculty members of institutions previously attended who are acquainted with the applicant’s ability for graduate study or from employment supervisors where applicable.
- Submit a typed personal statement of academic and professional plans and the reasons for selecting Morgan State University.

Depending upon the degree program, a student may begin graduate work in the fall, spring, or summer.

APPLICATION PROCEDURES

The applicant is solely responsible for presenting full credentials on or before the deadline date for the session of expected entrance. The application for admission to graduate study cannot be processed until all credentials are on file.

To be considered for financial aid, applications for admission for the Fall semester must be received by February 1, and applications for the Spring semester by November 1 of each year. Applications for the Summer sessions should be received by May 1 of each year.

Applications from seniors in their last semester of undergraduate study will be evaluated on the basis of their course work through the first semester of their senior year. Admission will be canceled if the credentials remain incomplete or do not meet the standards of the School of Graduate Studies or the degree program by the start of the semester that the applicant seeks to enroll.

Students submitting false information when applying for admissions will be denied admission. Where the submission of false information is discovered after a student has been admitted the student will be removed from the School of Graduate Studies and may be subject to additional sanctions.
NON-DEGREE STATUS
The primary goal of the School of Graduate Studies is to facilitate the admission of students into academic programs leading to the award of masters and doctoral degrees. Students who, at the point of applying to the School of Graduate Studies, have no degree objectives may enroll in select graduate courses to the extent that resources, academic requirements, and the availability of space allows. Pursuant to the provisions outlined below, students admitted as non-degree may subsequently apply for a degree program. Successful completion of graduate courses as a non-degree student does not guarantee admission to a master's or doctoral degree program.

Students applying for non-degree status in the School of Graduate Studies must possess a bachelor's degree from a regionally accredited college or university. Students must provide official transcripts from all colleges and universities that they attended in pursuit of the baccalaureate degree. Additionally, applicants for admission as non-degree students must also satisfy one of the following criteria:

- Possess a cumulative 3.0 grade point average covering all credits from all colleges and universities attended; or,
- Possess a minimum cumulative grade point average of 2.5 and has graduated from a college or university for five or more years; or,
- Earned a master's or doctoral degree from a regionally accredited college or university; or,
- Places in the upper 50th percentile of the Graduate Record Examination (GRE), the Miller's Analogies Test (MAT), or the Graduate Management Admissions Test (GMAT); or,
- Provides a strong letter of support from a chairperson of a graduate degree program, or a coordinator of a graduate degree program, or from a faculty member who teaches graduate courses at Morgan.

Applicants admitted as non-degree students may enroll in a maximum of eight (8) credits a semester for a maximum of five years and must maintain a 3.0 cumulative GPA. Non degree students who fail to register for three consecutive academic semesters are no longer considered continuing students and will be required to submit a new application in order to continue with the balance of any remaining time in the initial five years. Students in a non-degree status are not eligible to receive financial assistance in the form of tuition awards, graduate assistantships or fellowships from the School of Graduate Studies.

**Application to a Degree Program:** Non-degree students who do not meet the criteria for unconditional or conditional admission to a degree program, may apply for admission to a degree program upon completion of a minimum of twelve graduate (12) credits with a cumulative GPA of 3.0 or better. Non-degree students applying for a degree program must meet all other criteria for admission to the degree program including, although not necessarily limited to:

- completed application to a degree program;
- original transcripts from all colleges and universities attended;
- three letters of reference;
- appropriate official test scores where required;
- interviews with program admission committees where required; and,
- submission of acceptable portfolios where required.

**NON-DEGREE CREDITS APPLIED TO DEGREE PROGRAMS**
A non degree student who is admitted into a degree program may apply no more than twelve (12) credits, including elective and internship courses, towards satisfying the total number of credits required to earn the degree. Students in a degree program who are dismissed for academic reasons will not be granted non-degree status.
RETAINING ACADEMIC RECORDS

Admission credentials and the application data of applicants who are not admitted or who do not register in the semester for which they have been admitted are retained for one year. All credentials, including academic records from other institutions, become part of the official student record and will not be returned to the applicant.

APPLICANTS FROM FOREIGN COUNTRIES

Morgan State University accepts its responsibilities to the global village by providing opportunities for graduate study to citizens from many nations. International students enhance the life of the University and contribute to the education and professional, as well as, personal growth of all students and faculty members. The School of Graduate Studies welcomes applications from students who are not citizens of the United States but who have appropriate documentation from the Immigration and Naturalization Service (INS) (including the 1-94 form) verifying their legal residence and/or student status in the United States. Applicants from foreign countries must meet all requirements for admission to School of Graduate Studies including having earned a baccalaureate degree as well as the Criteria for Admission listed above.

Before the application will be processed from a student who has completed secondary and post-secondary education outside the United States, the School of Graduate Studies must have received the following:

- An application for admission to the School of Graduate Studies.
- An evaluation of the applicant’s credentials from either Educational Credential Evaluators, Inc., (ECE) P.O. Box 92920, Milwaukee, Wisconsin 53202-0970, (414) 289-3400 or from World Educational Services (WES), P.O. Box 745, Old Chelsea Station, New York, NY 100113-0745, (212) 966-6311. Application forms for ECE or WES can be obtained by writing to the company or to the School of Graduate Studies. The application for evaluation of foreign credentials, however, must be sent directly to ECE or WES in strict accordance with their instructions.
- Provide test scores (for those programs requiring them) on the Graduate Management Admissions Test (GMAT), the aptitude portion of the Graduate Record Examination (GRE), or the Miller Analogies Test (MAT). (Test scores may not be more than 5 years old prior to the date of application).
- Three letters of recommendation from professors in the applicant’s field.
- A one-page typed personal statement of academic and professional plans and the reasons for selecting Morgan State University.

Scores from the Test of English as a Foreign Language (TOEFL). Information about this examination may be obtained from TOEFL, Educational Testing Services, Princeton, New Jersey 08540 (TOEFL scores are not required for applicants from the British Commonwealth, Australia, Canada, Great Britain, West Indies, New Zealand, South Africa, Nigeria, Kenya, and Tanzania).

Applicants from other countries currently enrolled at another college in the United States may not register until they have been officially admitted to the School of Graduate Studies and have received written approval on their Form 1-94 from the United States Immigration Service permitting them to attend Morgan State University. In addition, such applicants must provide a completed Transfer Eligibility Certification form signed by the International Student Advisor at the institution from which they wish to transfer. Transferring international students must provide official documentation of one year of financial support before a new 1-20 can be issued.

Additional information concerning the requirements for foreign applicants may be obtained from the Office of the School of Graduate Studies.
ENGLISH LANGUAGE PROFICIENCY
A good command of the English language is necessary for all students enrolled at the University. English is the language of instruction for all classes. Exams, written papers, theses and dissertations must be submitted in English. Applicants whose first or native language is not English must demonstrate their proficiency in English. A score, not more than 2 years old, on the Test of English as a Foreign Language (TOEFL) must be submitted as part of the application for admission.

The TOEFL exam is given throughout the world several times a year. For information and application materials, write: TOEFL, Box 899, Princeton, N.J. 08541, U.S.A. Official scores should be sent directly to The School of Graduate Studies at Morgan State University in time to meet the deadline(s) for admission. Foreign applicants are exempt from submitting TOEFL scores where: (a) English is the native language of the student’s country of origin; or (b) for the past five (5) years, the student has been a legal alien, a naturalized citizen, or otherwise a legal resident of the United States; or (c) the student holds a bachelor’s, masters, doctorate, or professional (e.g., law or medicine) from a regionally accredited college or university in the United States or where English was the language of instruction. Regardless of format, only official TOEFL scores are acceptable.

It is the responsibility of applicants from foreign countries to assure that all documents not written in English are accompanied by a literal English translation. The completed application should be sent to:

School of Graduate Studies
Morgan State University
1700 East Cold Spring Lane
Holmes Hall, Room 206
Baltimore, MD 21251

INFORMATION ON STUDENT VISAS
The University is authorized by the U.S. Immigration and Naturalization Service (INS) to issue documents to enable international students to obtain the F-1 visa. Following academic admission to a degree program, the School of Graduate Studies reviews the language, financial, and visa qualifications of the applicant. If all documentation is in order, a “Certificate of Eligibility” (I-20 form) is issued to the prospective student. In order to request a visa for entry to the U.S. as a student, the “Certificate of Eligibility” (the I-20 form) must be submitted to a U.S. Embassy or Consulate along with any other required documents.

International students with F-1 visas must maintain full-time student status during the academic year (i.e., both Fall and Spring semesters). Before transferring to another college or university, they must attend the university (i.e., the institution that issued the I-20 form used to apply for entry to the U.S.) for at least 1 semester. International students are advised to pay particular attention to restrictions about employment and length of stay in the U.S. on their visa. International students are further advised that INS regulations restrict the employment of non-immigrant students. Work without prior INS authorization is prohibited and may carry severe penalties including deportation. Certain dependents of international students are not eligible to request permission neither to work nor to accept employment of any kind.

It is the responsibility of international students to maintain a valid visa status and to stay informed about current visa and/or INS regulations. Students are advised to consult with a U.S. consular officer in their home country for current information affecting their visa status. It is a requirement of the F-1 visa status that an international student report to the primary designated school official (PDSO) within one week of initial enrollment. The PDSO at Morgan is the International Students’ Advisor who is located in the University’s Counseling Center. A designated school official (DSO) is also located in the School of Graduate Studies.

GRADUATE WORK BY MORGAN SENIORS
Seniors at Morgan State University who have completed 96 credit hours toward the baccalaureate degree with a cumulative grade point average (GPA) of 3.0 or better and who also possess a minimum GPA of 3.0 in their major may register for a maximum of six (6) credit hours of course work in the School of Graduate Studies with the approval of the chairpersons of departments concerned, and the Dean of the School Graduate Studies.
Upon admission to the School of Graduate Studies, students may, when appropriate, have the credit earned for graduate courses taken as an undergraduate applied towards a graduate degree at Morgan. Or, with the prior written permission of the Department Chairperson in which their major is located, seniors may elect to have the credit earned for graduate courses applied towards a baccalaureate degree at Morgan. The credit earned, however, may be applied to satisfy degree requirements only once; either to complete requirements for the bachelor’s degree or, to complete graduate degree requirements. In order to be officially registered in a graduate course, undergraduates must:

- complete an application to take graduate courses prior to the start of the graduate course;
- have their application form signed by the Chairperson (or the Chairperson’s designee) of the department in which the graduate course is taught; have their application signed by the Dean of the School of Graduate Studies;
- complete a Drop/Add form with the graduate course(s) in which the student seeks enrollment filed with the Dean of the School of Graduate; and,
- be registered for the graduate course(s) by the School of Graduate Studies.

This policy applies to qualified seniors interested in enrolling in graduate courses. Undergraduates improperly enrolled in graduate courses may be administratively withdrawn from this course. Undergraduates who may be admitted to accelerated bachelor’s to master’s degree programs should consult their program requirements on registering for and the application of graduate courses to degree requirements.

**REGISTRATION AND ENROLLMENT**

Only persons who have received an official letter of admission from the Dean of the School of Graduate Studies may enroll in graduate courses. Once an official letter of admission, including a personal identification number (pin) has been received, students may register for graduate courses online through the web student information system. A schedule of course offerings is published before the beginning of each semester and may be obtained from the School of Graduate Studies upon request or may be found on Morgan’s website.

Registration is not complete until all required fees and tuition have been paid. Students are not permitted to attend classes unless they are officially registered. Only those students whose names are shown on the official class roster are officially registered and will be eligible for a grade. Students should check with the course instructor to see if their names are listed on the class roster. If their names are not on the class roster, they should inquire about the absence of their names at the office of the School of Graduate Studies. Course instructors are not permitted to add names of students to the class roster.

**CONFLICTING POLICIES**

The School of Graduate Studies awards degrees in more than thirty-nine (39) disciplines. Each department may identify additional admission requirements for their graduate programs. Occasionally, departmental policies may conflict with or be inconsistent with those of the School of Graduate Studies. Where such conflicting policies exist, the policies of the School of Graduate Studies shall have precedence.
GRADUATE STUDENT RESPONSIBILITIES
Admission to the School of Graduate Studies at Morgan State University indicates that the student is seeking to achieve the highest standards of scholarship. The Dean and the graduate faculty expect admitted students to successfully meet the academic challenges of graduate school and to consistently perform above average in their course work. Although each student will be assisted by an advisor and other members of the professional staff, final responsibility for compliance with the School of Graduate Studies’ policies, including the standards of scholarship, rests with the student. It is the responsibility of graduate students to satisfy all course requirements in which they are enrolled and to be knowledgeable of all school and program and/or degree requirements necessary to complete the plan of study. In addition to the policies, procedures and academic requirements found in the graduate catalog, students are encouraged to periodically check with departmental or program advisors for changes in individual departmental policies and those that occur between the publication of the graduate catalogs.

STATUTE OF LIMITATIONS (5 & 7 YEARS RULES)
Students, whether part time or full time, pursuing graduate degrees at the University with requirements of less than 45 credits, (e.g. most Master’s programs), must satisfy all degree requirements within five (5) years from the date of admission to the School of Graduate Studies.

Students, whether part time or full time, pursuing graduate degrees at the University with requirements of 45 credits or more, (eg. Doctoral programs and a few Master’s programs), must satisfy all degree requirements within seven (7) years from the date of admission to the School of Graduate Studies.

Failure to satisfy all degree requirements within the relevant statute of limitation is evidence of failure to make satisfactory academic progress and is, therefore, grounds for dismissal from the School of Graduate Studies. Students whose statute of limitations has expired and who have been dismissed from the School of Graduate Studies will not be permitted to re-enroll in any graduate degree program at the University.
STANDARDS OF SCHOLARSHIP

POLICIES ON GRADING

GRADES FOR GRADUATE STUDENTS
The following grades are issued for graduate students at the University:

- A  Superior
- B  Average
- C  Unsatisfactory
- F  Failing work, must repeat course
- P  Pass
- I  Some phase of work is incomplete
- AW An administrative withdrawal given for appropriately documented financial, sickness, or unusual nonacademic reason
- W  Official Withdrawal

Grades of “D” are not issued to graduate students.

Although a student may be required to enroll in an undergraduate course as a prerequisite to a graduate course (or admittance to a graduate program), undergraduate courses will not count for graduate credit.

GRADING FOR THESES AND DISSERTATIONS
Once candidates begin to writing theses or dissertations they must be continuously enrolled at the University until the degree requirements are satisfied. Enrollment may be satisfied by being registered for Thesis or Dissertation Guidance until the thesis or dissertation is approved and submitted to the Dean of the School of Graduate Studies.

Students failing to maintain continuous registration will be required to pay the costs of all previous semesters for which registration was required. Degree requirements may not be satisfied until this is done.

See grade descriptions for the following courses as shown:

Upon completion of the defense of their dissertation or their thesis, students shall receive a final grade of “P” (pass) or “F” (fail) for Dissertation Seminar (i.e.,___.998 and ___999 courses where applicable) or for Thesis Seminar (i.e.,____799).

GRADE POINT AVERAGE
The grade point average (GPA) is computed according to the quality points accompanying the letter grade. An “A” grade is calculated at 4 quality points, a “B” grade at 3 quality points, and a “C” grade is calculated at 2 quality points. Grades of “I” receive no quality points. After a student is matriculated as a graduate student, all courses numbered 500 and above except those graded with an I, CS or S, will be used in the calculation of the GPA. Graduate credit transferred from another institution is not included in the calculation of the grade point average.

UNSATISFACTORY GRADES “C” AND “F”
Both grades of “C” and “F” indicate unsatisfactory academic progress in graduate courses. Students may not posses “C” grades totaling more than 20 percent of the total credit hours required for satisfying degree requirements. Students do not earn credit towards their degree for any courses where they receive a grade of F. Grades of “F” are computed, however, as part of the GPA.

CHANGE OF GRADE
A graduate student’s academic transcript is intended to serve as a complete and permanent history of the student’s academic progress at Morgan State University. A transcript will not, therefore, be altered except in conformance with the School of Graduate Studies’ policy governing change of grade. Grades for graduate students remain as part of the student’s permanent record. Changes in previously recorded grades may be made within one semester where the original instructor certifies that an actual mistake was made in determining or recording the grade. The faculty member must submit supporting documentation (e.g. roll book, grade sheet, etc.) to the Chairperson to justify the grade change. The change must be approved by the Department Chairperson, the College/School Dean, the Dean of the School of Graduate Studies and the Provost/VPAA.
INCOMPLETES ("I" GRADES)
An "I" grade indicates that the requirements for a course have not been completed. An "I" grade is given only in exceptional cases where: a student's work in a course has been satisfactory; and, due to documented illness; or, other documented emergencies beyond the student's control, s/he has been unable to complete the requirements for the course. Incompletes must be removed by the end of the next semester of enrollment following the granting of an incomplete ("I") grade or, the "I" grade is changed to "F". Having two or more Incompletes that have become "F" grades is evidence of failure to make satisfactory academic progress and, therefore, is grounds for academic dismissal. Students may not graduate with an "I" grade recorded on their Morgan State University transcript.

ACADEMIC PROBATION
Graduate students are required to maintain a minimum cumulative grade point average of 3.0 in order to remain in good academic standing. Specific graduate programs may require students to maintain higher academic standards and/or a higher minimum GPA in their programs of study.

Students whose cumulative GPAs fall below a 3.0 or whose cumulative GPAs falls below the minimum required in their degree program at the end of any semester, are automatically on academic probation. Students who are on academic probation for two (2) consecutive semesters will be dismissed from the School of Graduate Studies.

GROUNDS FOR ACADEMIC DISMISSAL
Students who after being placed on academic probation accumulate two (2) consecutive semesters with a cumulative GPA of less than the minimum required in their degree program or who otherwise fail to make satisfactory academic progress will be dismissed from the School of Graduate Studies. Grounds for academic dismissal also include: failing to meet the specific academic requirements of the degree program;
- failing to maintain a minimum cumulative GPA of 3.0 (i.e., "B" average);
- exceeding the Statue of Limitations;
- failing comprehensive or preliminary examinations;
- earning "C" grades totaling more than 20 percent of the credits needed to satisfy degree requirements; or,
- receipt of more than two grades of "F".

Appeals concerning academic progress, including academic probation or academic dismissal must be addressed in writing to the Chairperson of the department of the degree program who, in consultation with the Graduate Coordinator, will review the appeal and prepare a report and written recommendation for review by the College/School Dean. The College/School Dean shall submit a written recommendation along with the report and recommendation of the Chairperson to the Dean of the School of Graduate Studies who shall make the final decision regarding a student's appeal.

RESIDENCY
A student is admitted to the School of Graduate Studies upon satisfying minimum academic criteria and any additional requirement (e.g. tests, portfolio, interview, etc.) established by the faculty in the graduate degree program in which the student seeks to matriculate. Following admission to the School of Graduate Studies, a student must complete a minimum number of credits at Morgan State University while matriculating in a graduate degree program. Upon completion of the minimum credits required to be taken at Morgan, the residency requirement has been met. Residency requirements apply to students matriculating in master's and/or doctoral programs.

The minimum requirement for residency in either master's or doctoral degree programs at Morgan State University is eighteen (18) credits of graduate course work completed at MSU. Transfer credit, internship, thesis, and dissertation seminar or guidance courses may not be used to satisfy residency requirements.

CANDIDACY
In contrast to residency, candidacy status applies only to students matriculating in doctoral degree programs. Candidacy refers to students who have successfully completed all course work and who have successfully passed all preliminary and/or comprehensive examinations required in the degree program. A student who has achieved candidacy status typically only has to complete the dissertation to satisfy graduation requirements. Depending on the degree program, students may be required to achieve candidacy status before enrolling in Dissertation Seminar (___998) and/or Dissertation Guidance (___997) courses.
GENERAL DEGREE REQUIREMENTS
Students may pursue only one degree program at a time. All requirements for the first degree must be satisfied before one may be admitted to another master’s or doctoral (i.e. a second) degree program.

Morgan State University reserves the right to make changes in academic policies, regulations, degree requirements, and schedules or courses offered.

ACADEMIC REGULATIONS
All graduate students are subject to the academic regulations of the School of Graduate Studies and the college, school, or department in which they are pursuing a degree. Students may expect to obtain a degree in accordance with the requirements set forth under regulations in force at the time they enter the University, or under subsequent regulations published in the most recent (i.e. current) catalog.

APPLICATION FOR GRADUATION
Students must file an Application for Graduation with the Dean of the School of Graduate Studies by November 1 if they expect to complete all requirements for graduation in time to participate in the May commencement ceremonies (i.e., by the end of the Spring semester of any year). Students who file an Application for Graduation by November 1 and who successfully complete all graduation requirements will receive their diploma during May commencement ceremonies. All graduates, including those who complete in December of the preceding year as well as those who complete in May, are expected to participate in the commencement ceremonies.

Students must file an Application for Graduation with the Dean of the School of Graduate Studies by May 31 if they expect to complete all requirements for graduation after the May commencement ceremonies but by the end of the Fall semester (i.e., December of any year). Students who file an Application for December graduation and who successfully complete all graduation requirements will receive their diploma but are expected to participate in the commencement ceremonies held the following May.

Before the Application for Graduation is filed with the Dean of the School of Graduate Studies, it must be signed by the Department Chairperson and stamped by the Bursar after the application fee has been paid. If a student does not complete all requirements for graduation by the end of the semester indicated on the Application for Graduation, a new form must be completed for the year (and semester) in which the degree is to be awarded. Although a new Application for Graduation must be filed whenever a student does not finish in the semester indicated on the application, the application fee is paid only once. Students applying for graduation should also make arrangements with the University Bookstore for the rental of academic robes and regalia.

DEGREE COMPLETION
Students must be enrolled in at least one graduate course, e.g. Thesis Guidance, Dissertation Guidance, or regular credit course, the semester (including summer sessions) that they submit for the thesis or dissertation to the school of Graduate Studies.

Students writing theses or dissertations must be continuously enrolled at the university, typically in either Thesis Guidance or Dissertation Guidance, and they must have satisfactorily defended their thesis or dissertation and have made all required corrections identified during the defense prior to submitting the thesis or dissertation to the School of Graduate Studies.

In summary, a student must be enrolled at the university the time the theses or dissertation is accepted by the School of Graduate Studies. Students who fail to continuously enroll after having enrolled in a thesis or dissertation course may be required to pay for each semester (excluding summer sessions) that they missed.

ADVISEMENT
Students admitted to a degree program are assigned a department advisor. Students are expected to consult with their advisors for program planning, scheduling, etc., throughout their residency as graduate students.

CHANGES IN PROGRAMS
Students wishing to transfer from one degree program to another must file a written petition with the Dean of the School of Graduate Studies. A change in program is not effective until the student receives written approval from the Dean of the College/School of the new program, and from the Dean of the School of Graduate Studies. Students who are not in good academic standing may not change degree programs.
TRANSFER CREDIT
A request for transfer of credit for courses taken prior to enrollment in the School of Graduate Studies will not be considered until
the student has satisfactorily completed at least 12 semester hours in his/her degree program at MSU. No more than six (6) se-
mester hours of graduate credit taken at other accredited institutions may be applied toward the masters degree. Transfer credit
is not counted in the cumulative average or overall average-of the program of study.

Once admitted to graduate work a student must obtain formal permission from the Dean of the School of Graduate Studies before
enrolling at another institution for a course that is to be offered in fulfillment of degree requirements at Morgan. Such permission
is granted only in exceptional instances and only after the student has been admitted to candidacy and is in good standing and
receives written approval of the Dean of the School in which his/her program is located.

Transfer work must be equal in scope and content to that offered by Morgan and must represent a coherent part of the required
program of study. Only courses in which grades “A” or “B” have been earned may be offered for transfer credit; grades for transfer
credits are not counted in the G. P.A. Course work to be transferred must have been taken within the time period allowed for the
completion of degree requirements. Credits for correspondence courses, workshops, and extension classes are not acceptable
for transfer.

TRANSIENT STUDENTS
Students enrolled in graduate programs at other universities and wishing to take course work in the School of Graduate Studies
at Morgan State University must present a letter of authorization from the graduate dean of the other university.

AUDITING
Students admitted to the School of Graduate Studies may audit courses provided permission is obtained from the Dean of the
School of Graduate Studies and the course instructor. Students are responsible for paying the auditing fee at the time of regis-
tration.

COURSE LOAD
Students enrolled for 9 or more graduate credit hours are considered full-time. The maximum course load for full-time students
in the Fall and Spring semesters is 15 credit hours. Students enrolled for less than nine (9) credits and for a minimum of six (6)
credits are considered part-time. Students in non-degree status are limited to part-time course load of 8 credits or less.

SUMMER SESSION
The School of Graduate Studies conducts two summer sessions. The maximum course load for all graduate students during
each of the Summer Sessions is 8 credit hours. A schedule of graduate courses for each session is available in the Office of the
School of Graduate Studies.

FORMER STUDENTS RETURNING
Former students returning to the University who have not enrolled in the School of Graduate Studies for three consecutive se-
mesters and have not corresponded with the School of Graduate Studies during that period are no longer considered as continuing
students and must first be readmitted to the School of Graduate Studies and may be required by the Dean of the School of Grad-
uate Studies to repeat the admissions process.

All rules, procedures and academic standards in effect at the time of new admission will apply and will be strictly enforced. In every
case, the five or seven year rule will apply to all previously earned credits for completed course work. (See General Degree Re-
quirements.)

DROPPING COURSES AND WITHDRAWALS
Students wishing to make adjustments to their course schedules must do so within the drop-add period indicated on the academic
calendar for the School of Graduate Studies. Students who are not successful in dropping or adding courses via the WEB must
appear in person at the Office of the School of Graduate Studies to file the necessary forms. DROP/ADD forms must have the
course instructor’s signature.
STANDARDS OF SCHOLARSHIP

Stopping payment on checks for registration fees and/or failing to attend class does not constitute an official drop of a course nor does stopping payments or absence from class constitute withdrawal from school. Failure to officially drop a course will result in a grade of “F” being assigned for the course. Failure to officially drop a course or failure to officially withdraw from school does not relieve graduate students of their financial obligation to the University.

Students must notify the Dean of School of Graduate Studies in writing and complete and sign the necessary withdrawal form(s) to officially withdraw from the University. Depending upon the time during the semester that their course is dropped or they officially withdraw from the University, students will be subject to a pro rata amount of the tuition and fees for the semester.

COURSE CANCELLATIONS
The Dean of the School of Graduate Studies reserves the right to cancel courses for insufficient enrollments; to limit enrollments in any class; and to assign students to added or split sections meeting at the same time and day.

TUITION WAIVER
Students, including senior citizens, eligible to use the State College Tuition-Waiver Plan, may register only when regularly scheduled course space is available.

A SECOND DEGREE
An application for admission to a degree program from a person who already holds a graduate or professional degree will be considered on its individual merits.

Credit hours counted toward one graduate degree may not be used to satisfy requirements for a second graduate degree. When course duplications occur, substitute courses will be approved in consultation with the faculty advisor and program coordinator. A maximum of two (2) master’s degrees may be earned at Morgan.

COMPREHENSIVE EXAMINATIONS
Candidates are able to apply to take the comprehensive examination when they: 1) have met the residency requirements for their program, 2) are in good academic standing, and 3) have departmental approval. Candidates must be enrolled at the time the comprehensive examination is to be taken. Comprehensive examinations are designed, administered and scored by a department faculty committee with results reported to the Dean of the School of Graduate Studies by the deadline on the current academic calendar. In addition, departments are required to report results by mail to each student concerned. Students should consult the graduate calendar for examination dates and their department for additional information. Comprehensive examinations may be repeated only once.

THESIS AND DISSERTATION REQUIREMENTS
In general, students may register for the thesis or dissertation seminar when they: 1) have met the residency requirement for their program, 2) are in good academic standing, and 3) have their department’s approval.

Students who write a thesis or dissertation must submit final copies of the typed manuscript to the Dean of the School of Graduate Studies for review following its oral defense. The thesis or dissertation must be signed by the Committee members and meet all other requirements prior to its submission. Minimum requirements for the production and submission of the thesis or dissertation may be found on the School of Graduate Studies web site at www.morgan.edu/academics/grad-studies/.

Graduate students submitting theses and/or dissertations to the School of Graduate Studies will be charged a fee for binding, microfilming copyrighting, and shipping. The payment of the fees must be verified by a receipt from the cashier’s office accompanying the thesis/dissertation when submitted to the School of Graduate Studies.

Once the theses/dissertations are returned from the bindery, students will be promptly notified at the most recent address on file in the School of Graduate Studies. The School of Graduate Studies will retain student copies of theses or dissertations for one year (12 months) after they are returned from the bindery. Students who paid for binding should also check periodically with the School of Graduate Studies regarding retrieving bound copies of their theses or dissertation.
DEGREE COMPLETION

Students must be enrolled in at least one graduate course, e.g., Thesis Guidance, Dissertation Guidance, or a regular credit course during the semester, including summer sessions, that their thesis or dissertation is submitted to the School of Graduate Studies. Students must be enrolled at the University at the time their thesis or dissertation is accepted by the School of Graduate Studies. Students must have made all corrections identified during the defense prior to submission of their thesis or dissertation to the School of Graduate Studies.

Students must be continuously enrolled at the University every semester (excluding summer sessions) once they have begun writing theses or dissertations (i.e., enrolled in Thesis Seminar, Thesis Guidance, Dissertation Seminar, or Dissertation Guidance). Students who fail to be continuously enrolled after having begun writing their thesis or dissertation may be required to pay the registration of semesters they missed (excluding summer sessions) prior to the submission of their thesis or dissertation to the School of Graduate Studies.

RESPONSIBLE ACADEMIC CONDUCT AND ETHICAL RESEARCH

OVERVIEW

Morgan State University in general and the School of Graduate Studies in particular, promote responsible and ethical research among graduate students. Graduate students are cautioned to avoid practices that threaten the integrity of their academic career and their research, including, but not limited to, falsification or fabrication of data, violations of privacy and confidentiality provisions, conflicts of interest, cheating, plagiarism, and copyright infringements. Unethical research threatens the integrity of the academic and scientific enterprise and may subject graduate students to severe penalties. For example, students are required to certify that any use of copyrighted material beyond “fair use” has the written permission of the copyright owner. If the permission to use copyrighted material does not accompany the dissertation, the copyrighted material will not be reproduced.

FEDERAL POLICY ON RESEARCH MISCONDUCT

Federal policy defines research misconduct as fabrication, falsification, or plagiarism in proposing, performing, or reviewing research, or in reporting research results. According to federal policy, fabrication is making up data or results and recording or reporting them. Falsification is manipulating research materials, equipment, or processes, or changing or omitting data or results such that the research is not accurately represented in the research record. Plagiarism is the appropriation of another person’s ideas, results, or words without giving appropriate credit.

Federal sanctions for research misconduct include, but are not limited to, letters of reprimand; the imposition of special certification or assurance requirements; suspension or termination of an active award; or suspension and debarment in accordance with applicable government-wide rules on suspension and debarment.

Graduate students are also advised that several federal agencies have promulgated policies, penalties, and procedures regarding research integrity. Typically, these policies address researcher responsibilities for data acquisition and management, authorship and publication practices, animal and human subjects, conflicts of interest, research misconduct, and compliance with agency policies. For example, see the policy concerning instruction in the responsible conduct of research promulgated by the Office of Research Integrity at the Department of Health and Human Service at http://ori.dhhs.gov.

ACADEMIC DISHONESTY

Academic dishonesty is among the most egregious offenses a student can commit because it interferes with the University’s primary mission of educating and evaluating students. Academic dishonesty, including cheating, plagiarism, abuse of academic/library materials, stealing and lying, in the preparation of testing, class assignments, or dissertations and theses is no less egregious. Academic dishonesty, whether in the classroom or in the preparation of the dissertation
or thesis will not be tolerated by the School of Graduate Studies. In particular, any graduate student found to have en-
gaged in plagiarism in the writing and preparation of course work, research papers and/or in the preparation of a disser-
tation or thesis shall be subject to the full range of penalties at the disposal of the School of Graduate Studies.

Plagiarism is submitting, either orally or in writing, the words, ideas, drawings, or other works of another person as one’s
own without appropriate citation in order to receive credit for having completed an academic assignment or exercise.

Examples: Examples of plagiarism include, but are not limited to, the following:

• Submitting material or work for evaluation, in whole or in part, which has been prepared by another student, by an
  author of a published article or textbook, or by persons producing papers for profit;

• Using a direct quote from another student’s papers or from an author of a publication without including the appro-
  priate citation;

• Paraphrasing or summarizing another’s work without including the appropriate citation; and,

• Using information stored electronically (e.g., submission of papers and or information found on computer disks, the
  Internet, etc.) without including appropriate citation and/or acknowledging the source.

PENALTIES FOR ACADEMIC DISHONESTY

Any graduate student at Morgan State University who is found to have engaged in academic dishonesty, including pla-
giarism, in the preparation of written assignments, a dissertation or thesis, may be subjected to suspension, expulsion
and/or revocation of a previously awarded degree. Such sanctions may be imposed even though the accused graduate
student may never have received a lesser penalty or penalties for previous academic dishonesty.

Suspension from the University. Suspension can be imposed for a specified period, not to exceed two years.

Expulsion from the University. Expulsion is a permanent separation from the University.

Revocation. When acts of academic dishonesty are found to invalidate a major piece of work required for a degree so
that the validity of the degree or certification is jeopardized, then the sanction may include a recommendation from the
Dean of the School of Graduate Studies to the University’s Provost and Vice President for Academic Affairs to:

  a. reject a dissertation, thesis or other work.
  b. revoke a certification or not grant a certification.
  c. revoke a degree.
FINANCES AND FINANCIAL AID

TUITION & FEES
The School of Graduate Studies offers a diverse array of programs in the Arts, Sciences, Engineering, Education, Business, Public Health, and in Social Work. Quality instruction is supplemented with the most up-to-date computers, internet connections, laboratory equipment and library facilities. These learning resources are made available for your educational achievement at a very competitive cost.

The University Bursar’s Office is available to assist in making financial arrangements to finalize your registration each semester. Be certain, however, to follow the directions outlined in the financial aid section of this catalog especially if any portion of your bill may be covered by fellowships, assistantships, tuition awards, or loans. Following these guidelines will assist in a timely credit of funds to your account. Please contact the Bursar’s Office at (443) 885-3108 for further assistance.

Schedule of Tuition & Fees
Tuition and fee charges are determined on an annual basis and vary between Maryland resident and non-resident students. An example of the cost of attending for one academic year, exclusive of books, travel, clothing and other personal items is as follows:

<table>
<thead>
<tr>
<th>Tuition and Fees*</th>
<th>Maryland Resident</th>
<th>$272.00 per credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Resident</td>
<td>$478.00 per credit</td>
<td></td>
</tr>
<tr>
<td>Mandatory Fees</td>
<td>$55.00 per credit</td>
<td></td>
</tr>
<tr>
<td>Resident</td>
<td>$372.00 per credit</td>
<td></td>
</tr>
<tr>
<td>Non-Resident</td>
<td>$513.00 per credit</td>
<td></td>
</tr>
<tr>
<td>Auditing</td>
<td>$50.00 per occurrence</td>
<td></td>
</tr>
<tr>
<td>Late Registration</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Additional Fees*
- Thesis/Dissertation
  - Copyright Fee: $65.00
  - Microfilming Fees:
    - Dissertation $55.00
    - Theses $45.00
    - Binding Fee: $15.00
  - Graduation Fee: $75.00

*The tuition and fees listed above represent charges at the time of publication of this catalog and are subject to change without notice. Fees related to dissertations and theses are dependent on the charges of the independent contractors who provide the copyrighting, microfilming, and binding services. Students are required to have their dissertations or theses copyrighted, microfilmed and a minimum of one copy bound for inclusion in Soper Library. There may be additional fees depending upon the student’s program.

Financial Aid
The School of Graduate Studies offers several forms of financial support to qualified graduate students including; Assistantships, Fellowships, Scholarships, and Tuition Awards. To be considered for financial support, a completed “Application for Assistantship, Fellowship, Scholarship” form must be on file in the School of Graduate Studies. For forms and/or additional information about eligibility criteria, you may visit the school of Graduate Studies web site at www.morgan.edu/academics/grad-studies/ or contact the School of Graduate Studies at (443) 885-3185. You may also inquire about opportunities for financial support through the University’s Office of Financial Aid, and the Transportation Center’s Office.
Award recipients should proceed to register for courses via the Internet and their awards will be posted to their individual accounts. Assistantships, fellowships, and/or tuition awards pay for tuition for graduate courses that are completed with a passing grade. Students are responsible for the tuition of courses that they audit, drop, fail or withdraw. University fees and other costs must be paid from the personal funds of each award recipient. Failure to pay fees in a timely manner will result in a student’s schedule of courses for the semester being deleted by the Bursar. After the drop/add period has ended classes will only be reinstated at the discretion of the Dean of the School of Graduate Studies and receipt of full payment of all tuition, fees and other costs assessed by the Bursar’s Office.

**Tuition & Fees for Summer School**
Tuition and fees for summer school classes are the same as the rates published for regular part-time tuition and fees as stated above. A studio fee for certain courses may be assessed according to the nature of the laboratory. The School of Graduate Studies does not award financial assistance for courses taken in summer sessions. Out of state students classified as in-state residents because they are awarded assistantships, fellowships or tuition awards during the Fall and Spring semesters will be charged out-of-state tuition during the summer session(s).

**OTHER FEES AND ASSESSMENTS0053**

**Late Registration Fee**
A late registration fee of $50.00 will be charged (beginning the first day of walk-in registration) to returning students who were registered during the previous semester and who failed to select classes and make satisfactory financial arrangements on or before the prescribed deadline. Students are encouraged to make financial arrangements by the prescribed deadline to avoid this charge. Deadline payment dates are published in the course schedule-booklet and are provided at the time of class selection.

**Graduation Fee**
Students planning to graduate must pay a $75.00 graduation fee to defray a portion of the cost of graduation exercises and diploma materials. To graduate, both academic and financial requirements must be fulfilled. Fulfillment of financial requirements includes payment of all financial obligations, including a graduation fee.

**Dissertation/Thesis Fees**
A fee will be charged for: copyrighting, microfilming, binding (each copy), and shipping. Fees may change according to charges of the contractors providing the aforementioned services.

**Transcript Fee**
There is a charge of $10.00 per in-person transcript pick-up. The University will mail transcripts without a fee. To obtain a transcript, registered students’ accounts must be current and former students’ accounts must be clear.

**Student Professional Liability Insurance Fee**
All students who are required to work in medical or related facilities for classes or internships will be assessed a fee for insurance coverage. The student will be required to pay this fee before placement in the facility. This fee is not related to the Health Insurance Fee. Students should contact their instructors for further information.

**OTHER EXPENSES**

**Vehicle Registration**
All vehicles registered on campus must be registered with the University. Commuter parking is $40.00 per year and resident parking is $38.00 per semester as space is available. Parking for the two summer school sessions is $10.00

**Parking Citations**
Parking citations vary depending upon the violation. A late fee of $20.00 will be assessed, if the fine is not paid within 30 calendar days.
Loss Or Destruction Of University Property
Should students lose or damage University property, they will be charged an amount sufficient to cover repairs or replacement. Any expenses covered in an emergency by the University for students will become a charge to the student.

University One Card — “Bear Necessity” Card
All students are required to have a “Bear Necessity” Card which will be issued at registration. In addition to serving as the official University identification card, it also serves as an authorization card for meals, library services and health services; a privilege card for athletic, academic and special events and provides access to residence halls, University facilities and labs. When monies are deposited into the card account, it functions as a debit card for University purchases (bookstore, convenience store, vending machines). There is no charge for issuing the initial card; however, there is a replacement fee of $25.00 for lost or stolen cards.

Overdue Library Material
Overdue library material fines are 25 cents per day with a maximum late return fine of $10.00. Overdue reserved material fines are 25 cents per hour with a maximum late return fine of $25.00. Charges for lost or mutilated library material include the replacement cost of the item and a processing fee of $20.00.

Students are to pay library fines at the University Cashier’s Office and then present their receipt at the Circulation Desk for clearance. Thirty (30) days after billing, a $10.00 non-refundable service charge will be added to the bill by the Bursar.

Billings And Payments
After selecting classes, students must review their bill online on Morgan State University’s website. Registration is not complete, nor is a student enrolled, until payment in full or other satisfactory financial arrangements are made with the Bursar. If the selection of classes is performed during the late registration period, payment is due immediately. Any outstanding balance (amount not covered by verified loans, assistantships, fellowships, or tuition awards) is due prior to registration being finalized and an official schedule of courses is issued. Failure to make satisfactory financial arrangements for the balance due by the prescribed date will necessitate cancellation of the class schedule.

The balance due can be paid by one of the following preferred means: cash (in person only), certified check, cashier’s check, money orders, VISA, MASTER CARD, DISCOVER CARD, and AMERICAN EXPRESS. Personal checks are acceptable, but if returned for non-sufficient funds (NSF), the check amount will be charged back to the student’s account with a $25.00 added penalty. A student’s personal check may not be accepted after the University receives one “non-sufficient funds” check from that student. Payments by mail should be sent to:

Morgan State University
P.O. Box 2341
Baltimore, Maryland 21203-2341

All checks and money orders should indicate the student’s name, address and account number. In person payments are made at the cashier's window of the Bursar’s Office of Montebello A -124 between 8:30 A.M. and 4:45 P.M., Monday through Friday. Arrangements for deferred payment of tuition and fees are made through the Bursar’s Office.

University Plan
The deferred payment plan is an arrangement available through the Bursar’s Office. Generally, a minimum of 80% of all charges (tuition, fees, room and board) is due to finalize registration. Only 20% may be deferred and divided into two equal installments to be paid on dates established at the beginning of the semester. A service charge of $25.00 is assessed each time a deferment is granted. A late fee of $20.00 is charged for each late payment.
Delinquent Accounts
A delinquent University account or Federal loan will result in one or a combination of the following:

No transcript, official recommendations or other transactions, including graduation, will be processed or forwarded for any student who fails to meet his/her commitments or who owes the University for any other reason(s).

The University will place at the Central Collection Unit of the State of Maryland (CCU) all delinquent student accounts. A collection fee of 17% or greater, will be assessed on all accounts placed with the CCU.

BILLING ADJUSTMENTS

Withdrawal
Students who, for any reason, leave MSU at any time during the semester must file an application for withdrawal (see instructions in the Academic Regulations section). Refunds are computed according to the date the signed application is received in the Registrar’s Office or when graduate students’ applications for withdrawal are received in office of the Dean of Graduate Studies. Students are entitled to a full reduction of tuition and fees charges if they withdraw prior to the end of the official drop/add period. Students withdrawing after the end of the official drop/add period are entitled to an adjustment in tuition charges according to the billing adjustment schedule as provided below. Fees are non refundable after the drop/add period. Stop payment on a check, failure to pay the semester bill or failure to attend classes does not constitute withdrawal.

Disciplinary Actions
Any student dismissed by the University for disciplinary reasons, whether during the drop/add period or once classes begin, shall not be entitled to any tuition and fees adjustment. Room and board adjustments are computed the same as outlined in the withdrawal policy.

Class Drops

Full-Time Undergraduate
The billing adjustment schedule, as provided below, applies to full-time students who officially withdraw from the University, but does not apply to reduced course loads. Full-time students who drop courses after the official drop/add period (even if the adjusted schedule is below 12 hours) will not be entitled to any tuition and mandatory fees adjustment.

Part-Time Undergraduate
Part-time students dropping course(s) are entitled to a prorated adjustment for tuition according to the billing adjustment schedule as provided below. Fees are non refundable.

Graduate
Graduate students dropping course(s) are entitled to a prorated adjustment for tuition according to the billing adjustment schedule as provided below. Fees are non refundable.
Billing Adjustment Schedule
Fall and Spring Semesters

When students make changes to their schedule prior to the end of the official drop/add period, the University will adjust account balances for 100% of applicable tuition and fees charges. Subsequent to the official drop/add period, tuition billings (not fees) for full-time undergraduate students who withdraw from all classes, or part-time undergraduate and graduate students who drop all or some of their courses will be adjusted as follows:

<table>
<thead>
<tr>
<th>Tuition Refunded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within first week</td>
</tr>
<tr>
<td>Within second week</td>
</tr>
<tr>
<td>Within third week</td>
</tr>
<tr>
<td>Within fourth week</td>
</tr>
<tr>
<td>Over four weeks</td>
</tr>
</tbody>
</table>

Withdrawal By All Financial Aid Recipients
Students who receive financial assistance must consult the Financial Aid Office before withdrawing from the University. Students who receive financial aid from the School of Graduate Studies must consult with the Financial Manager of the School of Graduate Studies before withdrawing from the University. Recipients who receive a refund may owe a portion of that refund to the financial aid program from which they benefited. Such students are expected to repay those benefits to which they are not entitled.

Refunds
In the event total credits exceed total tuition and fees students are entitled to a refund. Refunds associated with Federal Direct Loans are processed automatically. Otherwise a refund request form must be completed by the student and submitted to the Bursar’s Office. Students should allow 6-8 weeks for receipt of refunds, since as the case with all payments, refunds are processed by the State and not by the University.

For students who have received the benefit of scholarships and loans from University funds, the computation of refunds to be remitted to the student will be made in such a way as to avoid duplication or overlap of funds paid to the student. The University reserves the right to apply any refund or part thereof to cover an outstanding indebtedness incurred by the student.
FINANCIAL AID

Depending upon available resources and criteria for eligibility, graduate students may receive financial aid in the form of scholarships (tuition awards), graduate assistantships including teaching assistantships (TAs), research assistantships (RAs), fellowships, work study and loans to assist students who have received unconditional admission to the School of Graduate Studies. In certain circumstances, staff employment, including a limited number of positions in the Office of Residence Life, may also be available.

Meeting eligibility requirements does not guarantee that students will receive funding. The award of funding is competitive and depends on a variety of factors including, but not necessarily limited to, GPA, degree program, source of funding, and recommendations from chairpersons or graduate coordinators.

In order to apply for financial aid, students must submit a completed Application for Assistantship, Fellowship, Scholarship form to the Dean of the School of Graduate Studies. The Financial Aid Committee of the School of Graduate Studies reviews applications and/or nominations for financial aid. The final decision regarding the award of assistantships, fellowships, scholarships, and some forms of on-campus employment rests with the Dean of the School of Graduate Studies. The award and posting of all financial aid to students’ accounts is coordinated by the University’s Financial Aid Office.

Federal work study and direct loan programs are only available through the University’s Financial Aid Office. Students interested in applying for work study and/or the direct loan program should submit a completed Free Application for Federal Student Aid (FAFSA) form directly to the University’s Financial Aid Office.

FREE APPLICATION FOR FEDERAL STUDENT AID (FAFSA)
Federal and State financial aid, including loans, is typically based on income and/or economic need. To determine eligibility for federal or State financial aid, a student must first complete the Free Application for Federal Student Aid (FAFSA). All graduate students who expect to receive financial aid through federal work study or through the federal direct loan program are required to complete the FAFSA form. The FAFSA forms are available in (and upon completion should be returned directly to) the University’s Financial Aid Office located in Room 209, A Wing of the Montebello Complex. Students may telephone the office at (443) 885-3170. Copies of the FAFSA form may also be obtained from the Office of the School of Graduate Studies. A new FAFSA form must be completed for financial aid each year that a student is enrolled even if a student has previously applied for or received aid. Students who will be taking at least 6 credits may also apply for federal financial aid for the summer sessions.

FEDERAL WORK STUDY PROGRAM
The Federal Work-Study (FWS) Program provides opportunities for students to work at on-campus or at off-campus nonprofit public service agencies. The primary purpose of the program is to permit the student to earn funds for the following year. The Free Application for Federal Student Aid form must be on file in the Office of Financial Aid at Morgan State University.

FEDERAL DIRECT LOAN PROGRAM
The Federal Direct Loan (FDL) Program offers Direct Subsidized and Direct Unsubsidized loans to students. Under the Direct Loan Program, the Federal Government makes loans to students through the University. For the Direct Loan Program, like the Federal Family Education Loan (FFEL) Program, the University determines the applicant’s eligibility and annual loan amounts. Applicants must be in good academic standing. Loan request forms may be obtained from the Office of Financial Aid at Morgan State University. The completed request must be submitted to the Office of Financial Aid at least three months prior to registration. The Free Application for Federal Student Aid form must be on file in the Office of Financial Aid at Morgan State University.
CRITERIA AND PROCEDURES FOR APPLYING FOR FINANCIAL AID

To be eligible for financial aid from the School of Graduate Studies, a student must, as a minimum, be admitted to and enrolled in a graduate program and pursuing a degree on a part-time (i.e., a minimum of 6 but less than 9 credits) basis. Students in non-degree or conditional admit status are not eligible for financial aid from the School of Graduate Studies. Part-time students are not eligible to receive fellowships or graduate assistantships. Graduate students who are pursuing less than 6 credits are not eligible for financial aid unless enrolled in Thesis Guidance, Thesis Seminar, Dissertation Guidance, or Dissertation Seminar. Students with employment benefits such as tuition remission, reimbursement or third party education assistance are required to exhaust those benefits prior to applying for financial aid from the School of Graduate Studies.

Assistantships, fellowships, and scholarships provided by the University or by the State of Maryland may not be used to pay for auditing courses, failed courses, dropped courses, undergraduate courses, courses taken at another college or university, registration for excess credit, or for miscellaneous charges such as late fees or parking tickets. Students are financially responsible for tuition for excess credits and all fees.

Students receiving tuition awards who drop courses or withdraw from the School of Graduate Studies are not entitled to fee adjustments or to a refund of tuition that would have been paid by the award. Similarly, students who withdraw from the School of Graduate Studies are not entitled to a refund from assistantships, fellowships, scholarships, or other institutional funds that may have been awarded to support their graduate studies.

Graduate students pay tuition at the in-state rate only for those semesters that they receive financial aid from the School of Graduate Studies. Once the financial aid ends, the student will be charged tuition at the out-of-state rate unless the student’s original admission status was in-state or a successful petition for in-state status has subsequently been filed.

TIME LIMITS

All assistantships, fellowships and scholarships funded through the School of Graduate Studies are subject to the following award time limits.

- a maximum of a 2 year award for students pursuing the Master’s degree; or
- a maximum of a 3 year award for students pursuing the Master’s degree requiring more than 45 credits for completion; or,
- a maximum of a 4 year award for students with a Master’s degree pursuing the Doctorate degree; or,
- a maximum of a 6 year award for students without a Master’s degree pursuing the Doctorate degree.

Requests for an extension of financial aid that has expired must be made in writing to the Dean of the School of Graduate Studies.

GRADUATE FELLOWSHIPS

A fellowship is financial aid from either the University or from external (grant or foundation) sources awarded to students who exhibit academic merit and promise. Fellowships are paid directly to students in the form of stipends for either 9 or 12 months depending on the student’s program of study. In addition to stipends, students who are awarded fellowships also receive a Tuition Award for 9 to 12 credits per semester. Fellowships may be awarded to qualified instate, out-of-state, or international students. To be eligible for fellowships students must:

- be admitted to the School of Graduate Studies;
- be enrolled full-time at Morgan State University, i.e., pursuing a minimum of 9 credits toward their degree; and,
- a minimum GPA of 3.0 or the minimum GPA of the student’s graduate program, whichever is higher.

Students receiving fellowships are expected to be involved in research projects. The School of Graduate Studies reserves the right to require an annual fellowship report from students receiving fellowships. A failure to submit a required annual fellowship report may result in the termination of the fellowship award. Continuation of a fellowship is contingent upon the availability of funds and upon satisfactory research performance and academic progress.

A fellowship award will be forfeited if the student falls below the minimum credits required for the fellowship; is not a continuing student (i.e., withdraws or resigns from the School of Graduate Studies or does not attend for a semester or more); changes classification from full time (i.e., minimum of 9 credits) to part time (i.e., less than 9 credits) student; is placed on academic probation;
or violates policies of the School of Graduate Studies and/or the University. Students who find it necessary to withdraw from the School of Graduate Studies for more than a semester but who expect to continue their studies at a later date should petition the Dean in writing prior to leaving for approval to return and for clarification of their admission status and eligibility for continued financial support.

**TITLE III GRADUATE FELLOWSHIPS**

Title III is a federal program that provides aid intended to equalize educational opportunity for disadvantaged students. As a part of the Higher Education Act of 1965 (and related amendments), Title III helps minority institutions provide equal educational opportunity to their students. In order to be eligible for a Title III Graduate Fellowship, a student must:

- be enrolled full-time (i.e., pursuing a minimum of 9 credits) in an eligible doctorate program, including Bioenvironmental Science Engineering, Mathematics or Science Education or Public Health and
- maintain a minimum GPA of 3.0 or the minimum GPA of the student's graduate program, whichever is higher.

Recipients of the Title III Graduate Fellowship receive a stipend and a Tuition Award of 9 to 12 credits per semester. Students should review the section above on Graduate Fellowships for additional information relevant to Title III Graduate Fellowships.

**GRADUATE ASSISTANTSHIPS**

The School of Graduate Studies offers two types of assistantships including Teaching Assistantships (TAs) and Research Assistantships (RAs). Assistantships may be awarded to qualified instate, out-of-state, or international students. To be eligible for assistantships students must:

- be admitted to the School of Graduate Studies;
- be enrolled full-time at Morgan State University, i.e., pursuing a minimum of 9 credits toward their degree; and,
- maintain a minimum GPA of 3.0 or the minimum GPA of the student's graduate program, whichever is higher.

Recipients provide a minimum of twenty hours per week of appropriate professional service for the department or office to which they are assigned and they may receive:

- a Tuition Award for 9 to 12 credits; and
- a stipend or salary for either 9 or 12 months depending on the department, program or office in which the assistantship is located; and,

Continuation of an assistantship is contingent upon the availability of funds, satisfactory academic progress and upon satisfactory performance of assigned duties. The School of Graduate Studies reserves the right to require a performance review each semester for students receiving assistantships. An unsatisfactory performance review may result in the termination of the assistantship. Additionally, an assistantship (or employment arranged through the School of Graduate Studies) will be forfeited where the student: falls below the minimum credits required for the assistantship (or employment); or, is not a continuing student (i.e., withdraws or resigns from the School of Graduate Studies or does not attend for a semester or more); or, changes classification from full time (i.e., minimum of 9 credits) to part time (i.e., less than 9 credits) student; or is placed on academic probation; or violates policies of the School of Graduate Studies and/or the University.

**TEACHING ASSISTANTSHIPS (TA)**

Doctoral programs typically require that applicants possess a master’s degree as a criterion for admission. Thus, in many cases, students admitted to doctoral programs at the University will possess the minimum qualifications to teach undergraduate courses in their discipline. For example, doctoral students with a master’s degree in English would be minimally qualified to teach composition and/or introductory courses in English. Similarly, doctoral students with a master’s degree in History would be minimally qualified to teach introductory courses in American History, and/or Western Civilization. In addition, teaching is one of the best methods of expanding one’s knowledge and skill in communication of a discipline. Although typically, funded through the departments in which they are matriculating, teaching assistants (TAs), are graduate assistants in the School of Graduate Studies and, as such, are subject to the policies and procedures of the School of Graduate Studies as published in the graduate catalog, and in other documents and/or publications applicable to graduate students.
I. Criteria for Appointment as a Teaching Assistant (TA)

In order to be eligible for consideration as a TA, graduate students would be required to meet the following minimum criteria:

Master's Degree
In order to be eligible for consideration as a TA, a graduate student must possess a master's degree in the discipline in which s/he is expected to teach. In some instances a graduate student without a master's degree may have acquired sufficient credits or possess the appropriate credentials to qualify for an appointment as a TA. Students without a master's degree applying for a TA will be considered on a case by case basis and must receive the approval of the Dean of the School of Graduate Studies and Dean in the school or college where they will be assigned.

Good Standing Criteria
A student in good standing must maintain the University's minimum criterion of a cumulative grade-point average (GPA) of 3.0. Where the department's academic requirement for good standing requires a higher GPA, the student must maintain the department's higher GPA in order to be considered as a TA. Students on academic probation are not eligible to be considered for teaching assistantships. In summary, good standing is a requirement at Morgan State University for graduate students retain fellowships, scholarships, and/or assistantships.

Registration Criteria
Typically graduate students appointed as TAs are enrolled full time for 9 to 12 credits. The Graduate Council recommends that the number of courses assigned to a TA not exceed four (4) per fiscal (i.e., 12 months) year. Where two courses are assigned to a TA in a single semester or during a summer session, it is also recommended that there be only one course preparation (i.e., the TA is responsible for different sections of the same course). Chairpersons are encouraged to also consider class size and/or the enrollment in courses scheduled to be taught by a TA.

Departmental Criteria
Departments usually appoint graduate students as TAs based on the needs of the department and students' academic excellence and promise as teachers. Students who possess a minimum of a master's degree in a discipline other than the department in which they are pursuing a doctorate may be appointed as a TA in another department but the student must also meet standards (e.g., GPA) for support within their own graduate department. Appointment of a non-degree student to a Teaching Assistance is an exception and requires written approval by the Dean of the School of Graduate Studies.

A TA appointment is typically for one academic year. Depending upon the availability of funds allocated to the Schools/College and the departments, a TA appointment may be for one semester. Teaching assistantships, however, may be terminated prior to the expiration of time for good cause such as incompetence, misconduct, or failure to carry out responsibilities set forth by the department chairperson, the graduate coordinator, or the faculty member assigned to supervise the TA. It is the responsibility of the department chairperson to establish procedures to evaluate a student's knowledge of the discipline and preparation to teach. Such procedures may include, but not necessarily be limited to: successful completion of an appropriate course offered at the University, through the School of Graduate Studies, or by the department, or school/college; enrolling in a related seminar; attending a relevant conference; achieving a certain score on a test; or earning passing marks on other evaluation instruments.

II. Duties of Teaching Assistants

1. Teaching Duties
Within a department, the particular assignment depends on the department's needs and the experience and academic qualifications of the TA. All TAs are serving under the direction and close supervision of the department chairperson or the chairperson’s designee. The specific duties of TAs may vary, however, from one department to another. Examples of the duties of TAs include:

- teaching undergraduate courses in subjects in which they possess a master’s degree in the appropriate discipline;
- assuming teaching responsibility for a laboratory or discussion session of a course;
- assuming teaching responsibility for a classroom section of a multi-sectional course, under the close supervision of the director(s) of the course;
assisting a faculty member in the grading, advising, and administrative duties necessary for a course(s); or,

assisting in general departmental administrative duties, such as advising or the administration of community programs, workshops, etc.

2. Departmental Assignments
Department chairpersons are required to notify graduate students, their College/School Dean, and the Dean of the School of Graduate Studies in writing as soon as practicable after hiring decisions are made about TA assignments and workloads for the following year. Most TA appointments are for one year; occasionally funding constraints or undergraduate enrollment patterns make it necessary for departments to offer less than year-long appointments. Graduate students who are not able to either accept the teaching assistantship or otherwise not able to fulfill their commitment to teach for the entire period assigned by the department should notify the department chairperson and the Dean of the School of Graduate Studies in writing as early as possible in order that the department chairperson may identify alternate TAs or adjunct faculty in a timely manner.

3. Time Commitment:
Including time for preparation, testing, and grading, the teaching assistantship is consistent with the minimum 20 hours per week of other graduate assistantships funded by the School of Graduate Studies. As a practical matter, however, the hours spent in preparation, classroom or laboratory time, and grading will differ from one discipline and/or department to another. Additionally, a new TA may find that the teaching assistantship requires more than the usual 20 hour week. Graduate TAs may be required to come to campus prior to the actual beginning of classes to assist with orientation and class-preparation duties. Department chairpersons and graduate coordinators should be mindful of the 20 hour per week assistantship guideline in making teaching assignments.

III. Compensation for Teaching Assistants

1. Annual Stipends
Compensation for teaching assistants shall include an annual stipend paid over 12 (i.e., for the fall and spring semesters, and where required, for 1 summer session) months. The payment of the stipend is from funds budgeted for undergraduate instruction and awarded by the Dean of the School/College to the department where the TA is assigned. An annual stipend is to be paid only to full time graduate (doctoral) students (i.e., those enrolled in 9 or more credits for each of the fall and spring semesters). The amount of the stipend shall be consistent with the amount for stipends awarded to doctoral students by the School of Graduate Studies for other graduate assistants. The current annual stipend for doctoral students is $16,000.

2. Departmental Supplements
The stipends for a full time teaching assistantship may be supplemented by departmental grants, and/or other external funds (with the exception of Title III funds). Even where a department supplements stipends for its teaching assistants, the department still may not require the student to work more than an average of 20 hours per week. Additionally, where a department elects to supplement stipends for TAs, the supplements must be the same for all students within a department or program.

3. Payment of Tuition
Subject to the availability of funds, TAs shall receive payment of their tuition for up to a maximum of twelve (12) graduate credits each semester in addition to an annual stipend. The payment of tuition does not include tuition for summer courses, courses in the winter or January term, nor for undergraduate courses. The payment of tuition likewise does not include payment of any fees, including but not necessarily limited to application fees, graduation fees, or university fees.

4. Residency Classification
Consistent with the policy of the School of Graduate Studies concerning graduate assistants, all TAs are billed at the in-state rate for credits taken during their appointment, including any credits they take over the 12-credit awarded under their assistantship. A graduate student’s official residency classification is governed by the University policy as determined by the Office of Records and Registration. Consequently, at any time when the graduate student is no longer supported by the assistantship, the student will be billed according to the official residency status that was assigned upon admission. The responsibility for satisfying the criteria for in-state residency requirements and/or clarifying the residency status rests with the graduate student.
IV. English Proficiency Requirement for International Teaching Assistants
The School of Graduate Studies encourages departments to offer teaching assistantships to a diverse array of graduate students without regard to race, ethnicity, gender, religion, creed, or national origin. The primary responsibility of a TA is to communicate knowledge and information in English to undergraduate students. Thus, with the exception of students from foreign countries where English is the primary language, all international TAs are required to be evaluated on their proficiency in English before they assume any classroom responsibility. This evaluation of English proficiency is in addition to satisfying the minimum score on the Test of English as a Foreign Language (TOEFL) required for admission to the School of Graduate Studies. International students are responsible for successfully completing all appropriate remedial English speech and/or composition courses at their own expenses to satisfy the English proficiency requirement before being assigned a teaching assistantship.

GRADUATE SCHOLARSHIPS (TUITION AWARDS)
The School of Graduate Studies offers two types of graduate scholarships including part-time and full-time tuition awards. Tuition awards assist eligible students pursuing a graduate degree on either a part-time or full-time basis. Part-time students are enrolled in 6 to 8 credits per semester. Students enrolled in less than 6 credits are not eligible for tuition awards. In order to be eligible to apply for a tuition award, students must:

- be admitted to the School of Graduate Studies;
- be enrolled full-time, i.e., pursuing a minimum of 9 credits toward their degree; or,
- be enrolled part-time, i.e., enrolled in a minimum of 6 credits;
- maintain a minimum GPA of 3.0 or the minimum GPA of the student’s graduate program, whichever is higher.

Students who receive a full-time tuition awards are subject to the Policy Prohibiting Employment. Recipients of tuition awards are responsible for paying for excess credit. Continuation of a tuition award is contingent upon the availability of funds and satisfactory academic progress. Additionally, a tuition award will be forfeited where the student: falls below the minimum credits required for the tuition award; or, is not a continuing student (i.e., withdraws or resigns from the School of Graduate Studies or does not attend for a semester or more); or, changes classification from full time (i.e., minimum of 9 credits) to part time (i.e., less than 9 credits) student; or is placed on academic probation; or violates policies of the School of Graduate Studies and/or the University.

GOLDSKIER SCHOLARSHIPS
Goldseker Scholarships are funded through a grant from the Morris Goldseker Foundation and are awarded to academically superior minority students who are legal residents of Maryland and who plan to matriculate on a full- or part-time basis. Students pursuing either a Master’s or Doctoral degree may be considered for a Goldseker Scholarship. In order to be eligible to apply for a tuition award, students must:

- be admitted to the School of Graduate Studies;
- be enrolled full-time, i.e., pursuing a minimum of 9 credits toward their degree; or,
- be enrolled part-time, i.e., enrolled in a minimum of 6 credits;
- maintain a minimum GPA of 3.0 or the minimum GPA of the student’s graduate program, whichever is higher.

Students should review the section above on Graduate Scholarships for additional information relevant to the Goldseker Scholarship.

TITLE III GRADUATE SCHOLARSHIPS
Title III is a federal program that provides aid intended to equalize educational opportunity for disadvantaged students. As a part of the Higher Education Act of 1965 (and related amendments), Title III helps minority institutions provide equal educational opportunity to their students. Students pursuing either a Master’s or Doctoral degree may be considered for a Title III Graduate Scholarship. In order to be eligible for a Title III Graduate Scholarship, a student must:

- be admitted to the School of Graduate Studies;
- be enrolled full-time (i.e., pursuing a minimum of 9 credits) in an eligible graduate program, including Bioenvironmental Science, Bioinformatics, Engineering, Mathematics or Science Education or Public Health; or,
be enrolled part-time (i.e., pursuing a minimum of 6 credits) in an eligible graduate program, including Bioenvironmental Science, Bioinformatics, Engineering, Mathematics or Science Education or Public Health;

- maintain a minimum GPA of 3.0 or the minimum GPA of the student’s graduate program, whichever is higher.

Students should review the section above on Graduate Scholarships for additional information relevant to the Title III Graduate Scholarship.

OFFICE OF RESIDENCE LIFE

Full-time graduate students enrolled in master’s or doctoral degree programs may apply for positions in the Office of Residence Life. Depending upon qualifications and experience graduate students may apply for Residence Director, Assistant Residence Director, and Administrative Assistant. These positions involve working for periods ranging from one semester to 12 months and are limited in number. Eligibility for positions in the Office of Residence Life requires admission to the School of Graduate Studies and a minimum 3.0 GPA. The Office of Residence Life may also set additional qualifications for positions in Residence Life. In addition to a salary, the graduate students employed by the Office of Residence Life receive a Tuition Award and may also be eligible for on campus housing accommodations.

RESIDENT DIRECTOR

The position of Resident Director is a full time, albeit contractual, 12 month position. In addition to the minimum requirements of the School of Graduate Studies, an applicant for the position of Resident Director must possess a Master’s degree in College Student Personnel or in another closely related discipline. Work experience in student affairs may also be required. Resident Directors are eligible to receive an apartment in the residence halls and a salary.

ASSISTANT RESIDENT DIRECTOR

An Assistant Resident Director works a minimum of 25 hours a week and are paid hourly wages depending upon qualifications and assigned duties. In addition to the minimum requirements of the School of Graduate Studies, an applicant for the position of Assistant Resident Director should have work experience or experience in undergraduate school as a peer counselor, an officer of student government, a resident advisor, or other related experiences. The position is typically a 10-month assignment. Assistant Residence Directors have the opportunity to apply for work during the summer in the Office of Residence Life. Assistant Residence Directors are also eligible to receive a room in the residence halls.

ADMINISTRATIVE ASSISTANTS

The position of Administrative Assistant serves as support to operations in the Office of Residence Life. Duties may include supervision of undergraduate work-study students. Duties may also involve special projects such as research, review of policies and procedures, and drafting documents. Administrative Assistants are required to work 25 to 30 hours a week and are paid hourly wages depending upon qualifications and assigned duties. Administrative Assistants may also be eligible for campus housing facilities.

Applications for positions in the Office of Residence Life should be made to the Assistant Director of Residence Life only after a student has been admitted as a full-time student in the School of Graduate Studies. The Office of the Assistant Director of Residence Life is located in Room 118 Tubman Hall, Morgan State University, Baltimore, MD 21251. The telephone number is (443) 885-3569. For information about their employment status students with positions in the Office of Residence Life should contact the Office of Human Resources, Room 100, Carter Grant Wilson. The telephone number is (443) 885-3195.

COMPUTER AND NETWORK TECHNICIANS

Graduate students pursuing master’s or doctoral degrees in engineering, information systems, bioinformatics or related disciplines or any graduate student who is proficient with computers and or computer networks may apply for an assistantship as a computer technician in Morganview, other residency facilities, offices or in computer laboratories on campus. Applications for an assistantship as computer technician should be made to the Dean of the School of Graduate Studies.
GRADUATE FINANCES & FINANCIAL AID

THE NATIONAL TRANSPORTATION CENTER

Financial support for graduate studies is also provided by the National Transportation Center (NTC) students who are conducting research, studying, and preparing to assume employment as professional managers and planners in all aspects of transportation management, planning, and analysis.

In partnership with the United States Department of Transportation (USDOT) and the Maryland Department of Transportation (MDOT), the NTC offers several assistantships, fellowships, and paid internship opportunities to support students pursuing the Master of Science in Transportation, Master of Science in City and Regional Planning, Master of Engineering, or Doctor of Engineering. Additionally, depending upon the funding agency, financial support may be available for students pursuing the Master of Architecture or the Master of Landscape Architecture. Currently, financial support for qualifying graduate students is available through the programs listed below.

THE EISENHOWER TRANSPORTATION FELLOWSHIPS

As a result of the passage of the federal Transportation Equity Act for the 21st Century, funding is available to support graduate research and studies through several Eisenhower Transportation Fellowships. The Eisenhower fellowships are administered by the Universities and Grants Program (U&GP) of USDOT which is responsible for university based transportation programs (of which-Morgan State University is a member) that are designed to attract and retain students from 550 universities and colleges to the field of transportation. Graduate students at Morgan may apply for:

- Graduate Fellowships which include a tuition scholarship up to $10,000 a year and a monthly stipend;
- Grants for Research (GRE) which enable students to assist with research activities at FHWA/DOT activities in the Washington, D.C. metropolitan area;
- Historically Black Colleges and Universities (HBCU) Fellowships for students pursuing transportation related disciplines and who plan to enter the transportation profession after completing their higher education.

Eisenhower (HBCU and Graduate) Fellowships are awarded on the basis of merit. Evidence of merit includes class standing, GPA, official transcripts, recommendations from faculty, employers, and/or other professionals. Award recipients are required to develop a transportation-related project to be submitted to the national Director of the Universities and Grants Program. In order to apply for an Eisenhower Fellowship an applicant must be a United States citizen. Applications are reviewed by a panel of prominent transportation faculty and professionals, including the Dean of the School of Graduate Studies or the Dean’s designee, that is convened by the Director of the NTC at the University. After receiving the recommendations of the review panel, the Director forwards his/her selection(s) to The Eisenhower Transportation Fellowship Review Panel for final evaluation of all applications. Recommendations for selection will be ranked in merit order and furnished to the National Highway Institute. The Director of the National Highway Institute will make the final selection.

SCHOLARSHIPS AND RESEARCH ASSISTANTSHIPS

In addition to the Eisenhower Fellowships, the National Transportation Center at the University also offers scholarships and research assistantships to qualifying graduate students. Qualifying students must be enrolled full time in a transportation-related program which include the Master of Science in Transportation, Master of Science in City and Regional Planning, Master of Engineering, Doctor of Engineering, Master of Architecture, and the Master of Landscape Architecture. Recipients of an NTC Scholarship receive $6,000 a semester. Research assistants funded by the NTC receive compensation for a minimum of 20 hours of work (i.e., research) a week.

Recipients of an NTC Scholarship must:
- be a full time student in a transportation related program;
- be a United States citizen or permanent resident;
- have an undergraduate GPA of 3.0 or above;
- maintain a GPA of 3.0 or above in the School of Graduate Studies; and,
- prepare a transportation research report at the end of each semester.
Recipients of an NTC Research Assistantship:
- must be a full time student in a transportation related program;
- need not be a United States citizen;
- must have an undergraduate GPA of 3.0 or above; and,
- must maintain a GPA of 3.0 or above in the School Graduate of Graduate Studies.

MARYLAND DEPARTMENT OF TRANSPORTATION (MDOT) INTERNSHIP
Students enrolled in the Center for Transportation Studies, the Institute of Architecture and Planning, and Civil Engineering may gain practical experience in transportation planning and management and receive significant compensation to finance their education. Students selected for the MDOT Internship Program work a minimum of 17.5 hours per week during the academic year and on a full-time basis during the summer. Participants in the MDOT Internship Program must:
- register for a minimum of 9 credits per semester (except summer); and,
- maintain a GPA of 3.0 or better during the entire internship.

Graduate students interested in additional information about and/or applications for the Eisenhower fellowships, scholarships, and research assistantships available through the NTC and the Center for Transportation Studies are encouraged to contact the National Transportation Center at Morgan State University, Room 206 in the D-Wing of the Montebello Complex. The telephone number for the Office of the National Transportation Center is (443) 885-3666. Interested students may also contact the School of Graduate Studies for more information.

POLICY PROHIBITING EMPLOYMENT
Full time graduate students who receive Graduate Assistantships (Teaching Assistantships or Research Assistantships) regardless of the source of funding or graduate students holding positions in the Office of Residence Life are prohibited from additional employment. Similarly, graduate students who receive full-time tuition awards or fellowships are also prohibited from employment. Graduate students found in violation of this policy are subject to sanctions including, but not necessarily limited to: revocation of financial assistantships and/or fellowships; reduction in the amount of available financial assistance; repayment of stipend and/or dismissal from the School of Graduate Studies.

ADDITIONAL FINANCIAL AID

UNIVERSITY FOUNDATION
Civic organizations, religious groups, business firms, foundations, or individual donors may make contributions to the Morgan State University Foundation for the support of graduate education. Eligibility criteria for the selection of recipients are typically established by the donor with the advice and consent of officers of the University Foundation. Information about such funds, if available, can be obtained from the School of Graduate Studies office or from the Morgan State University Foundation. The University’s Foundation is located in Room 201, Truth Hall. The telephone number is (443) 885-3040.

CAMPUS EMPLOYMENT
A limited number of positions may be available to graduate students who possess skills required for the position and who are enrolled as full-time students. Students may obtain application forms from the Office of Financial Aid at Morgan State University. All applicants interested in campus employment should call (443) 885-3141.

VETERAN’S BENEFITS
The School of Graduate Studies is approved for the training of veterans. To determine eligibility for veteran’s benefits applicants are required to submit a Request for Eligibility to the Veterans Administration, Federal Building, 31 Hopkins Plaza, Baltimore, Maryland 21201.

It is recommended that veterans obtain information from their local representatives of the Maryland Veterans Commission or from the main office, Room 113, Federal Building, Hopkins Plaza, Baltimore, Maryland 21201. For information on Veterans Benefits, students may also contact the Office of the Assistant Registrar located in Room 112, in the A Wing of the Montebello complex. The telephone number is (443) 885-3300.
REGULAR UNIVERSITY EMPLOYEES
Regular full-time employees who otherwise meet the criteria for admission may enroll in graduate courses and pursue a degree in the School of Graduate Studies. University employees' eligibility for financial assistance while pursuing graduate studies is contingent upon several factors including, but not limited to, their employment status and whether their employment is full or part time. No regular employee who is employed full time at the University is eligible for a graduate assistantship, fellowship or scholarship. Regular full-time and regular part-time employees of the University who have been admitted to the School of Graduate Studies may be eligible for a tuition waiver according to University policy.

University employees whether full or part time are encouraged to review the full text of the Morgan State University Policy On Tuition Waiver for clarification of their eligibility for education benefits, including tuition waiver for graduate credits.

CONTRACTUAL EMPLOYEES
Contractual employees are hired pursuant to an employment contract for a specified period of time (i.e., a term) and are not eligible for educational benefits, beyond those set forth in the contract.

Contractual employees may be eligible for payment of graduate courses provided that they meet the criteria for admission and they satisfy the following conditions:
- The employee has negotiated the payment of tuition for graduate credit as part the contract prior to execution of the contract by the President; and/or,
- The Dean of the College or School where the contractual employee is to be hired has included in the employment contract the source of funding (e.g., grant, foundation, corporation, etc.) to pay for the graduate credit; or,
- The Vice President of the administrative unit where the contractual employee is to be hired has included in the employment contract the institutional source of funding (e.g., line item in the budget, grant, etc.) to pay for the graduate credit.

Where the source of funds to pay for graduate credit is an institutional budget, full-time contractual employees are limited to negotiating six (6) credits a semester and part-time contractual employees who are working at least fifty (50%) percent or more, but less than full-time in a position which lasts six months or more) are limited to negotiating no more than the proportion of hours worked, based on a maximum of six (6) credit hours per semester and on the availability of space. Spouses and dependent children of contractual employees are not eligible to have their tuition paid for by institutional funds.

Consultants and independent contractors are not employees of the University and, therefore, are not eligible for tuition waivers, tuition remission or other educational benefits from the University. Consultants and independent contractors must qualify for admission and meet the same eligibility requirements for financial assistance as other (non-employee) applicants to the School of Graduate Studies.

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1. *The School of Graduate Studies does not offer loans. Loan programs are available in the University’s Financial Aid Office. The telephone number is (443) 885-3170.*

2. *International students educated in the United Kingdom, English Speaking Canada, Ireland, Australia, New Zealand, or the British Commonwealth Caribbean are exempt for the English proficiency evaluation.*
ACADEMIC RESOURCES AND SERVICES

GRADUATE COUNCIL
The Graduate Council serves as an advisory body to the Provost/VPAA. The Council reviews proposed policies and curricula for all graduate programs and submits recommendations for changes to the Provost/VPAA. The Council is comprised of voting and non voting members. The voting members include Department Chairpersons (of graduate programs), one graduate student representative and the Dean of the School of Graduate Studies. The non voting members include the President, Provost/VPAA, Academic Deans, and the Graduate Coordinators.

The mission of the Graduate Council is to insure that the graduate programs offered by Morgan State University are of the highest quality; are consistent with academic standards of comparable graduate programs throughout the nation, but in particular, comparable graduate programs within the State of Maryland.

The duties of the Graduate Council are to:
• develop and implement policies and procedures for the improvement of the operation of the School of Graduate Studies;
• recommend amendments to existing policies and procedures related to the School of Graduate Studies;
• develop and to regularly review criteria for membership in the graduate faculty;
• review proposals for new graduate programs and for the addition, suspension and deletion of courses; and,
• periodically review and assess existing graduate programs.

The bylaw’s for the Graduate Council are found on the School of Graduate Studies website at www.morgan.edu/academic/Grad-Studies/.

MORRIS A. SOPER LIBRARY & INFORMATION TECHNOLOGY CENTER
The University library is named for the late Judge Morris A. Soper, who served Morgan College and Morgan State College for thirty-four years as a member and as chairman of the Board of Trustees. Included among Soper's holdings are books, periodicals, government documents (designated as a U.S. Depository Library in 1940), and electronic media. Nonprint materials such as recordings, slides, videocassettes, and art reproductions are also available. The microform collection has journals, newspapers, books, and a variety of other documents. To use the varied formats of materials, there are audiovisual equipment, microform readers/printers, microcomputers, CD-ROM workstations, printers, and photocopiers.

The Beulah M. Davis Special Collections Room houses books, documents and manuscripts that constitute one of the larger university collections of African-American materials in the country, thus providing unique opportunities for study and advanced research. There is a microcomputer laboratory that provides access to the campus computer network, many software packages, and the Internet. An array of other materials and services is also provided for library users.

Other libraries in the vicinity supplement Soper’s facilities. A direct borrowing agreement makes the library resources of the University System of Maryland (USM) available for use by registered students, faculty, and staff at any of the USM institutions. Morgan participates in the Baltimore Academic Libraries Consortium (BALC) which makes students eligible for reciprocal borrowing privileges at certain BALC libraries. For information about the use of these resources and other services—ask at the Reference Desk. Current library hours are posted at the entrance to the building, on the library’s Web pages and printed copies are available upon request.
MCKELDIN CENTER
The Mckeldin Center is expected to serve as the future home of the School of Graduate Studies and the Continuing and Professional Education Program. As such, the Mckeldin Center will also be the hub of formal and informal extracurricular activities on campus for graduate students. The building will house lounges, meeting rooms, conference rooms and facilities for the Morgan State Graduate Students Association.

HOUSING ACCOMMODATIONS
Residence hall accommodations are available to graduate students, at Morganview Apartments or other residences on campus. Although the University assumes no responsibility for off-campus housing, students will be assisted in finding satisfactory accommodations. Inquiries should be addressed to the Director of Housing, Residence Life (443) 885-3217.

BOOKSTORE
The Bookstore, located in the new Student Center, sells textbooks, stationery and supplies, magazines and sundries. Normal operating hours are 8:30 a.m. to 5:00 p.m., Monday through Friday. During the first two weeks of each semester the Bookstore hours are extended to 7:00 p.m. Major credit cards may be used for book purchases; personal checks are not accepted.

HEALTH SERVICE CENTER
Students requiring medical attention may contact Woolford Infirmary on the South Campus. Service is provided Monday through Friday from 8:00 a.m. to 4:30 p.m. The infirmary is closed on Saturdays and Sundays. If medical care is needed after hours or on the weekend, students may call the infirmary on call service at (443) 885-3236 and follow directions as given.

PARKING
All students and staff who park vehicles on the campus must abide by the regulations for parking and traffic control. Vehicles parked in violation of University parking regulations and posted parking restrictions are subject to ticketing and towing. Students may purchase a parking decal at registration. Parking information may be obtained from the Police Department at (443) 885-3100.

SNOW EMERGENCY
Classes, (but not final examinations) are cancelled whenever snow or weather conditions force the closing of the University. Students should listen for announcements on television and radio stations; they should not call the University. (See Inclement Weather Policy; Appendix G)
ACADEMIC RESOURCES AND SERVICES

OFFICE OF INTERNATIONAL STUDENT AFFAIRS
The Office of International Student Affairs assists foreign students with their adjustment to the University community. It also organizes a speaker’s bureau program. The Foreign Student Advisor assists students with matters relating to cultural and social adjustment, transfer of schools, etc. It also organizes a speaker’s bureau program.

The Foreign Student Advisor also coordinates cultural awareness activities, workshops, and group counseling sessions to help students deal with their group or individual problems. A Host Family program is available in conjunction with local church and community groups.

The Office of International Students Affairs is located in the Carter-Grant-Wilson building, Room 2020. The office hours are 9:00 a.m. until 5:00 p.m. weekdays and the telephone number is (443) 885-3078/3038

CAREER DEVELOPMENT
The Center for Career Development (CCD) provides assistance to graduate students and degree holding alumni. The staff at this center will assist students in developing strategies for effective job searches. The CCD is the focal point of career planning activities for Morgan State University students and recent alumni. The career-related needs of graduate students are usually quite different from their undergraduate counterparts. It is the basic philosophy of the CCD that when students engage in effective and efficient career planning throughout their college years, “placement” (entry into employment or even further study) takes care of itself.

In following this tenet, graduate students are encouraged to register with the CCD early in their matriculation at the University and maintain regular contact with the staff. By registering with the CCD, graduate students provide valuable information that assists the staff in the development of programs and activities that meet their needs including, Career Counseling & Advising, Career Information, Professional Development & Job Search, On-Campus Recruitment, and Career Days & Job Fairs.

POLICE & PUBLIC SAFETY
The Campus Police Department is located in the Washington Service Center, Room 319. The Director of Public Safety can be reached at (443) 885-3169. However, reporting of crimes and/or requests for police assistance should be directed to (443) 885-3103/3179. (See Campus Security Statement; Appendix D)

SERVICES FOR STUDENTS WITH DISABILITIES
The Office of Services for Students with Disabilities (SSD) provides and coordinates services to students with disabilities. The SSD program is designed to help ensure that students with disabilities have equal access to University programs and to help provide an environment in which they can be successful while enrolled at Morgan.

Morgan State University is committed to providing barrier-free education to individuals with disabilities and actively works to have its facilities and programs in full compliance with Section 504 of the Rehabilitation Action of 1973. Prospective or currently enrolled students who have learning, mental or physical disabilities should contact the SSD Coordinator before registering for classes. Accommodations, which may include special registration, reader services, specialized equipment, note takers, sign language interpreters, or other arrangements to aid in removing or circumventing architectural, social, or procedural barriers, may be available to assist students with disabilities.
DOCTOR OF ENGINEERING

CLARENCE M. MITCHELL, JR. SCHOOL OF ENGINEERING

OFFICERS OF ADMINISTRATION

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DOCTOR OF ENGINEERING (D.Eng)

Purpose
The purpose of the Doctor of Engineering program is to prepare students beyond the application of advanced engineering principles to the ability to perform independent research, problem definition and problem solving. The goal of this program is to produce engineering professionals who are leaders in their fields of stated and demonstrated expertise.

The program leading to the degree of Doctor of Engineering is formally affiliated with the department where activities are most closely related to an applicant’s advanced study goals. However, the range of inquiry may (and is encouraged to) cross traditional departmental and school lines such that research and practical experience opportunities are extremely broad, and, that highly individualized programs can be pursued.

Objective
The Doctor of Engineering program is designed to provide advanced engineering education and experience that is professionally oriented and which will afford graduate degree engineers the opportunity to develop into strong engineering professionals, applied researchers, managers of technology, technologically trained educators, and technological advocates. The Doctor of Engineering program is characterized, in large part, by the special nature of the dissertation. As part of the dissertation development process, the student may be required to work with industry, a governmental agency, or a consulting engineering firm to develop a dissertation topic that is tailored individually to the student. The planning of content for this experience is done in conjunction with the faculty and corporate (government) advisor(s). All parties (student, faculty advisor, corporate advisor) will work together to meet the needs of the student, the academic and professional standards of the university, and the competitive posture of the involved corporation (government agency) respectively.
Admission
Admission to the doctoral program will be considered for those persons who, in addition to meeting admission requirements of the School of Graduate Studies, also possess the following qualifications:

- Preference for admission to the Doctor of Engineering program is given to those persons who hold a Masters Degree from an accredited graduate engineering degree program. Applicants holding masters degrees in computer science, physics, and other science and mathematics-related fields and who are currently pursuing careers closely aligned with engineering will be considered for admission to the Doctoral Program on a case by case basis.
- Exceptional students, upon the recommendation of a faculty committee, who are graduates with a Baccalaureate Degree from ABET accredited Engineering programs, may apply and be considered for admission to the Doctoral Program. Students, with Baccalaureate Degrees, who have completed 18 credit hours of Masters Degree work with a Grade Point Average (GPA) of 3.5 or greater, may apply to the Doctoral program.

General Requirements
- All candidates for the Doctor of Engineering degree must complete the required program of coursework, seminars, and research described in this catalog.
- All candidates must pass an Admission to Candidacy examination. In addition, when required by the student’s Advisory/Doctoral committee, the student must take and pass a Preliminary examination.
- All candidates must submit a doctoral dissertation. When the dissertation has been completed to the satisfaction of the committee chairperson, a dissertation defense will be scheduled at which time the student must orally defend his or her work before the entire Doctoral Advisory Committee.
- All requirements for the doctoral degree in Engineering must be completed within a period of seven consecutive years from the date of admission.
- All candidates are expected to participate in experiences in academia, industry or a government agency, as required by the candidate’s Advisory or Doctoral Committee.
- All candidates must satisfy residency requirements.

Residency Requirements
All candidates must satisfy 18 credit hours of residency requirements in one of the following ways:
- Full-time candidates for the Doctor of Engineering degree must satisfy residency requirements by enrolling in nine (9) credit hours per semester, for two (2) consecutive semesters.
- Part-time candidates for the Doctor of Engineering degree must satisfy residency requirements by enrolling in six (6) credit hours per semester, for three (3) consecutive semesters.
- Upon completion of course requirements and all required examinations, the candidate must continue to register for “Dissertation Guidance” each semester until the dissertation is successfully completed.

Program of Study
The program of study for a doctoral student is prescribed on an individual basis. The student’s undergraduate degree concentration, master’s degree concentration, professional engineering related experience, and future goals are taken into consideration in creating a program of study.

The program of study is directed toward building doctoral level capability in an interdisciplinary, but comprehensive body of knowledge. For example, the following civil engineering-related sub-disciplines are available: applied mechanics, environmental engineering, geomechanics, geotechnical engineering, groundwater hydrology, hydrology, infrastructure planning and engineering, structural engineering, structural mechanics, and transportation engineering.

Notice of Intention
Students who have completed at least 12 semester hours, and have attained a cumulative grade point average of at least 3.2, may file notice with the appropriate engineering department of intention to become a candidate for the Doctor of Engineering (D.Eng.). If a student, already enrolled for the Master’s degree, wishes to file notice to become a candidate for the D.Eng., the student must re-apply. The notice of intention must include a plan of study with a major and a minor specialty identified and approved by the Preliminary Advisory Committee.
Two Options are Available Within the Doctoral Program

Option 1: M.S./M.E. to D.Eng.
The minimum requirement for a Doctoral Degree is 30 credit hours beyond a Master’s Degree. The course credit hours must be at the 500-600 level and above, of which a minimum of 21 credits are at the 600 level and above. The 30 graduate credits include those credits students take following their matriculation as a Doctor of Engineering student, at Morgan State University. This does not include credit for the dissertation. This requirement may, however, be increased at the discretion of the student’s Advisory Committee. Dissertation Research credit is determined by the student’s major professor and Doctoral Advisory Committee (a minimum of 12 credit hours is required). Up to 12 graduate credit hours from a regionally accredited institution at the 500-600 equivalent level or higher may be transferred with approval by the major professor.

Option 2: BS to D.Eng.
The minimum requirement for the Doctoral Degree is 60 credit hours beyond a Bachelor’s Degree. This does not include credit for the dissertation. This requirement may, however, be increased at the discretion of the student’s advisory committee. Of the 60 credits, a maximum of 33 credits can be at the 500 level; and the remaining (excluding Seminar and Project Report courses) must be at the 600 level and above. Up to 12 graduate credits from a regionally accredited institution, with ABET accredited programs, at the 500-600 equivalent level or higher, may be transferred with approval. The Dissertation Research credit requirement is determined by the student’s major professor and Advisory committee. A minimum of 12 Dissertation credit hours is required.

Under Option 2, the candidate will have the option of terminating at the Master’s Degree provided the candidate has completed the requirements for the Master of Engineering program.

Plan of Study
The contents of an approved plan of study will be determined by the student and his or her Advisory Committee. The committee will consider the student’s interests and suggestions in arriving at an approved preliminary plan and subsequent revisions as may be required. Normally, the student will take all of the courses offered in, at least, the sequence of specialized graduate work embracing the major specialty of interest in which he or she proposes to conduct research.

Minor Specialty
The minimal number of degree credit hours is designed to ensure depth in the candidate’s field of concentration. To achieve breadth across relevant fields of study, individuals are encouraged to exceed the minimum by taking a sequence of coordinated cross-disciplinary courses from within the School of Engineering or from other schools on campus (i.e. Schools of Business, Science, Liberal Arts, or Education).

Examinations
The Doctoral student is required to take two (2) examinations: (A) the Admission to Candidacy examination; and, (B) the Dissertation Defense examination. In addition, when required by the student’s Doctoral Advisory Committee, a Preliminary Examination must be passed. At the discretion of the Advisory Committee, the Admission to Candidacy examination can be written, oral, or both written and oral. The Dissertation Defense is oral. The examinations are to be taken in the following manner:

Admission to Candidacy: (A) Examination
An admission to candidacy examination will be conducted to judge the candidate’s comprehension of graduate course work and the candidate’s ability to propose, to present and to defend the results of independent research. At the time of this examination, the student must make a presentation of his/her proposed research, which presents the underlying engineering technologies and outlines the plan of research. This examination is to be conducted by the full Doctoral Advisory Committee. Should the student fail this Candidacy Examination, the Doctoral Advisory Committee determines the conditions to be met before a second examination is to be administered. A third examination is prohibited.
Dissertation Defense (B) Examination:
All doctoral candidates are to conduct a major research project, the result of which culminates in a dissertation. This dissertation must be a well-reasoned application of advanced knowledge of technology and must show evidence of scholarly attainment in the student’s major specialty. The Doctoral Advisory Committee will conduct the dissertation defense examination. This examination will determine the candidate’s ability to apply advanced engineering disciplines to problems of substance in a creative and scholarly manner. Prior to the time of the (B) examination, if the Doctoral Advisory Committee deems it a requirement, the student must have submitted a paper of his/her research to a conference or professional journal. Any deficiencies that may have been uncovered in previous examinations must have been rectified before a candidate can be permitted to take his dissertation examination.

Other Miscellaneous Considerations
If a Doctoral candidate goes to industry or government while completing his/her research, an Understanding of Agreement must be drawn up between the company, advisor, and advisee. This agreement outlines the goals and expectations concerning the overview and completion of the research dissertation before the advisee leaves. All work will continue to be conducted under the guidance and approval of the Major Advisor in absentia.
MASTER OF ENGINEERING (M.E.)

Purpose
The primary purpose of the Master of Engineering Degree program is to prepare individuals for the practice of engineering. The program emphasizes the theory and application of advanced engineering principles utilizing the most advanced computational and analytical methods and tools. The goal of the program is to produce forward-looking engineering professionals who are capable of making significant contributions to society, while safeguarding the environment.

Preference for admission to the Master of Engineering Degree program is given to those persons who hold a Baccalaureate Degree from an accredited undergraduate engineering degree program. Persons who are graduates of computer science, mathematics, physics, and other science and mathematics-related fields will be considered. The Master of Engineering Degree study program (generally full-time) is intended for those persons who plan to practice engineering in industry, government, academe or as entrepreneurial professionals. This degree program may also serve as the initial step towards the doctorate for those who are inclined to advance their knowledge of technological, managerial and engineering design and practice-based concepts.

Objectives
The interdisciplinary Master of Engineering Degree program is designed to:
- Support the student to be successful in his/her academic and professional objectives;
- Develop an appreciation of the importance of a closer relationship between engineering education and engineering practice;
- Develop an appreciation for engineering design and for the product/process realization continuum;
- Develop a consciousness for and commitment to the importance of life-long learning;
- Provide a complement to basic research-oriented graduate degree programs;
- Develop a philosophy for the role of research, application, and the environment in the product/process realization cycle;
- Provide an innovative path to the terminal degree; and
- Generate a cadre of well-trained engineering professionals.

Admission
Admission requirements to the M.E. degree program are commensurate with the admission requirements of the School of Graduate Studies. Exceptional students who also possess a GPA of 3.5 or greater in their major area of study and 3.5 GPA or better overall may apply for unconditional admission into the program at the beginning of their senior year.

Applicants holding degrees in computer science, mathematics, physics, and other science and mathematics-related fields and who are currently pursuing careers closely aligned with engineering will be considered for admission to the program. Applicants holding degrees in fields other than engineering, mathematics and science may be considered for admission to the program, given that they have the requisite mathematics and science foundation.

An applicant who has deficiencies in foundation courses, as defined by an advisor or departmental committee, may be required to successfully complete a number of undergraduate courses with a goal of meeting minimum departmental requirements. Undergraduate courses, taken for this purpose, may not be used to fulfill any of the requirements for the master's degree. In addition, applicants must satisfy other requirements as specified by the School of Graduate Studies.

General Requirements
All candidates who seek to earn the Master of Engineering degree will be required to complete a total of 33 acceptable credit hours of coursework inclusive of 2 credit hours of seminar and 4 credit hours of Project Report. Successful completion and oral defense of the Report Project is required in lieu of taking a comprehensive examination.

Program of Study
A core requirement of three interdisciplinary courses (9 credit hours) will be required of all students entering at the master’s level. These courses are carefully designed and coordinated to stress the interdisciplinary nature of the subject matter. The content serves as the philosophical foundation on which all other materials tailored for a specific student are based. The courses are as follows:
Eighteen credits (excluding 6 credits of seminars and project reports) are directed toward building an interdisciplinary strength in a sub-discipline. For example, the following civil engineering-related sub-disciplines are available: applied mechanics, environmental engineering, geomechanics, geotechnical engineering, groundwater hydrology, hydrology, infrastructure planning and engineering, structural engineering, structural mechanics, and transportation engineering.
# MASTER OF SCIENCE – TRANSPORTATION (M.S.)

**ANTHONY SAKA, PH.D.**  
Graduate Coordinator, Transportation  
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E-mail: asaka@morgan.edu

## Objective

The Master of Science degree program in Transportation provides an interdisciplinary curriculum in transportation that prepares students to assume professional positions in transportation engineering, transportation planning, and analysis. Students can concentrate their studies on transportation engineering, transportation planning, transportation management, or freight transportation and logistics. With the approval of the transportation faculty, students may use appropriate courses in other disciplines to supplement the requirements of their program of study.

## General Requirements

Candidates must select a thesis or non-thesis option.

All candidates for the degree who select the thesis option must complete thirty-six (36) credit hours (including TRSP 799, Thesis Seminar) and submit an acceptable thesis.

Candidates selecting the non-thesis option must complete forty-two (42) credit hours and pass a written comprehensive examination. All students must complete the core requirements as indicated below.

## Program of Study

### Core Program (Required of all students)  
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRSP 601</td>
<td>Introduction to Urban Transportation</td>
<td>3</td>
</tr>
<tr>
<td>TRSP 602</td>
<td>Economics of Transportation</td>
<td>3</td>
</tr>
<tr>
<td>TRSP 603</td>
<td>Quantitative Methods in Transportation</td>
<td>3</td>
</tr>
<tr>
<td>TRSP 620</td>
<td>Transportation Systems Evaluation</td>
<td>3</td>
</tr>
<tr>
<td>TRSP 788/789</td>
<td>Supervised Research</td>
<td>3</td>
</tr>
<tr>
<td>TRSP 799</td>
<td>Thesis Seminar (Thesis option only)</td>
<td>3</td>
</tr>
</tbody>
</table>

### Concentration Requirements  
(Thesis Students must select 12 credit hours and non-thesis students must select 15 credit hours)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRSP 513</td>
<td>Transportation Internship</td>
<td>3</td>
</tr>
<tr>
<td>TRSP 514</td>
<td>Advanced Transportation Internship</td>
<td>3</td>
</tr>
<tr>
<td>TRSP 504</td>
<td>Operations Research Applications in Transportation</td>
<td>3</td>
</tr>
<tr>
<td>TRSP 606</td>
<td>Urban Public Transportation Systems</td>
<td>3</td>
</tr>
<tr>
<td>TRSP 607</td>
<td>Freight Transportation Systems and Logistics</td>
<td>3</td>
</tr>
<tr>
<td>TRSP 608</td>
<td>Advanced Logistics and Supply Chain Management</td>
<td>3</td>
</tr>
<tr>
<td>TRSP 609</td>
<td>Transportation in Developing Countries</td>
<td>3</td>
</tr>
<tr>
<td>TRSP 610</td>
<td>Management of Transportation Systems</td>
<td>3</td>
</tr>
<tr>
<td>TRSP 611</td>
<td>Labor Relations in Transportation</td>
<td>3</td>
</tr>
<tr>
<td>TRSP 612*</td>
<td>Special Problems in Transportation</td>
<td>3</td>
</tr>
<tr>
<td>TRSP 613</td>
<td>Air Quality Planning</td>
<td>3</td>
</tr>
<tr>
<td>TRSP 615</td>
<td>Traffic and Highway Systems Design and Analysis</td>
<td>3</td>
</tr>
<tr>
<td>TRSP 616</td>
<td>Microcomputer Applications in Transportation</td>
<td>3</td>
</tr>
<tr>
<td>TRSP 617</td>
<td>Intelligent Transportation Systems</td>
<td>3</td>
</tr>
<tr>
<td>TRSP 618</td>
<td>Advanced Urban Transportation Planning</td>
<td>3</td>
</tr>
<tr>
<td>TRSP 619</td>
<td>Geographic Information Systems</td>
<td>3</td>
</tr>
</tbody>
</table>

*Repeatable for only 6 credits toward degree
Electives

(Thesis Students must select six credit hours and non-thesis students must select 12 credit hours)

All other Institute for Transportation Courses (see Course descriptions following this section of the catalog), plus courses from other departments such as City and Regional Planning, Civil Engineering, and the Earl G. Graves School of Business and Management. The Institute encourages students to take courses from other departments that complement the degree program. However, for any course taken outside of the Institute, it is necessary to gain approval from the student's advisor to use a course for credit toward the degree.
COURSE DESCRIPTIONS

CIVIL ENGINEERING

CEGR 510  Principles of Environmental Engineering I
Three Hours: 3 Credits
The course covers basic concepts in environmental engineering design including environmental engineering hydrology, hydraulics, and pneumatics; water treatment; and conventional wastewater treatment. Prerequisite: Graduate standing.

CEGR 511  Principles of Environmental Engineering II
Three Hours: 3 Credits
A continuation of CEGR.510 and covers advanced wastewater treatment, solid waste management, and air pollution control. Prerequisite: CEGR.510.

CEGR 512  Principles of Environmental Engineering III
Three Hours: 3 Credits
The course covers basic concepts in environmental engineering design not covered in CEGR 510 and CEGR 511 and includes hazardous waste management and risk assessment, noise pollution and control, and environmental quality modeling (water, ground, and air). Prerequisite: Graduate standing.

CEGR 513  Environmental Chemistry and Microbiology
Three Hours: 3 Credits
Chemical laboratory work includes analyses of turgidity, color, pH, acidity, alkalinity, and hardness, etc.; and instrumental methods using high pressure liquid chromatography, gas chromatography, and atomic absorption, etc. The microbiological analyses include uses and functions of the microscope, multiple-tube and membrane filter techniques. The laboratory analyses are covered independently from the lecture. The lecture covers combustion chemistry, chemistry of the anaerobic process, and atmospheric chemistry. Prerequisite: Graduate standing.

CEGR 514  Environmental Impact and Risk Assessment
Three Hours: 3 Credits
The course covers strategies and methodologies that have been used to assess the impact of engineering projects. These include technology to assess the impact on air, surface water, and ground water quality, and on land use of transportation facilities, water supply and pollution control facilities, and industrial and community development. Prerequisite: Graduate standing.

CEGR 531  Reliability Analysis for Infrastructure and Environmental Systems
Three Hours: 3 Credits
Systems reliability and reliability analysis. Includes measures of reliability, reliability index, correlation coefficient, influence, reliability bounds, Point Estimate Method, Monte Carlo Simulation and others.

CEGR 533  Matrix Structural Analysis
Three Hours: 3 Credits
CEGR 613   Physical-Chemical Treatment of Waste and Wastewater I  
Three Hours: 3 Credits  
This course uses object-oriented programming in conjunction with Visual C++ and MFC (Microsoft Foundation Classes) to solve problems in the physical-chemical treatment of water and wastewater. Coverage includes C++, Visual C++, objects, classes, object-oriented programming and advanced topics in unit operations of the physical-chemical treatment of water and waste water including flow measurements and flow and quality equalization; pumping; screening, settling, and flotation; mixing and flocculation; filtration and aeration, absorption, and stripping. Prerequisite: CEGR 512.

CEGR 614   Physical-Chemical Treatment of Waste and Wastewater II  
Three Hours: 3 Credits  
This course covers areas of the physical-chemical treatment of water and wastewater not covered in CEGR 613 and includes the unit operations of carbon absorption and membrane processes and the unit processes of water softening and removal of nitrogen and phosphorous, fluoridation and defluoridation, iron exchange, and disinfection. As in CEGR 613, this course uses object-oriented programming in conjunction with Visual C++ and MFC (Microsoft Foundation Classes) to solve problems in the physical-chemical treatment of water and wastewater. Prerequisite: CEGR 613.

CEGR 615   Open Channel Hydraulics  
Three Hours: 3 Credits  
This course covers basic principles and energy and momentum equations, uniform flow, gradually varied flow, and spatially and rapidly varied flow. In addition, this course emphasizes computer programming; hence, elements of C++ will be discussed. These include objects, classes, class libraries and object-oriented programming. A software project will be required for submission at the end of the course.

CEGR 616   Biochemical Processes in Environmental Engineering  
Three Hours: 3 Credits  
This course covers the basic fundamental principles of microbiological processes in environmental engineering systems. Basic concepts in microbiology, qualitative tools for describing stoichiometry and energetics of microbial reactions; qualitative tools for microbial and enzymatic kinetics and the principle of mass balance in the analysis of biological reactors are presented.

CEGR 617   Advanced Biochemical Processes in Environmental Engineering  
Three Hours: 3 Credits  
This is an advanced course in biochemical process engineering application in environmental quality control. It covers in depth application of the principles of microbiological system in the treatment of water, wastewater and biodegradation of hazardous chemicals in the environment.

CEGR 619   Modeling of Groundwater Flow  
Three Hours: 3 Credits  
Numerical solutions of the ground water flow equations (Partial Deferential Equations). Emphasis on learning methodology and the use of groundwater flow models such as MODELOW, FLOW PATH AND SEETRAN. Prerequisites: Hydrodynamics of Groundwater, FORTRAN Programming and Partial Differential Equations (PD).

CEGR 620   Modeling of Groundwater Pollutant Transport  
Three Hours: 3 Credits  
Numerical and analytical solutions of the advection-dispersion equation. Emphasis on learning methodology and the use of groundwater models in contaminant and transport such as MT3D, RT3D and MODELOW. Prerequisites: Hydrodynamics of Groundwater, FORTRAN Programming and Math (PD) applications.

CEGR 623   Hydrodynamics  
Three Hours: 3 Credits  
This course covers fundamental concepts of dynamics of surface water flow, analysis and characteristics of flow in open channels, flow and channel design with consideration of various types of flow, methods and application of flow measuring devices, and problem solving. Prerequisites: Groundwater Hydrology, Fluid Mechanics and Math (PD).
CEGR 624 Hydrostatistics
Three Hours: 3 Credits
Introduction to hydrostatistical data estimation using the concepts of variograms, multivariate techniques, correlation analysis, and linear multiple linear regression. Introduction to some stochastic hydrologic models. 
Prerequisites: Hydrology and Math (probability and stastics)

CEGR 625 Modeling of Surface Water
Three Hours: 3 Credits
This course emphasizes fundamental concepts and theory and methods of modeling surface water flow, establishment of conceptual, physical, mechanical, mathematical models and applications of analytical and numerical solutions to solving engineering problems related to environmental issues. Prerequisites: Advanced Hydrology, FORTRAN programming and Math (ODE and PD).

CEGR 626 Surface Water Hydrology
Three Hours: 3 Credits
This course emphasizes fundamental concepts of surface water hydrology and physical processes in surface and shallow subsurface water. Through exercises and problem sets, the course introduces students to practical techniques utilized in applied surface water hydrology. Prerequisites: Fluid Mechanics and Math (PD and ODE).

CEGR 627 Introduction to Multiphase Flow
Three Hours: 3 Credits
This course emphasizes fundamental concepts of theory of multiphase flow including physical processes within multiphase flow, conservation of mass, energy and momentum, constitutive relations of multiphase flow and analytical solutions for problems related to multiphase flow through porous media. 
Prerequisites: Continuum Mechanics, Advanced Groundwater Hydrology and Math (PD)

CEGR 628 Bridge Engineering
Three Hours: 3 Credits
Historical development of the modern highway bridge; materials; loads and the load path; reinforced concrete bridges; slab, T-Beam and box girders; slab-steel beam bridges, non-composite vs. composite sections; design of continuous steel beam bridges; plate girder bridges; pre-stressed concrete bridges; serviceability; inspection, maintenance and rehabilitation of highway bridges; bridge aesthetics. Prerequisite: CEGR 436 Elementary Structural Design or equivalent.

CEGR 630 Finite Element Analysis
Three Hours: 3 Credits
Approximation techniques; Introduction to the Finite Element Method; weighing functions; Galerkin formulation; 1-d and 2-d finite elements; coordinate systems; field problems-irrotational flow, heat transfer; structural and solid mechanics, axial force member, theory of elasticity; linear and quadratic elements, element shape functions; isoparametric elements; Software platform ANSYS 5.3. Prerequisite: Matrix Structural Analysis or consent of instructor.

CEGR 631 Structural Dynamics
Three Hours: 3 Credits
Free and forced vibrations of damped and undamped, single-degree-of-freedom and multi-degree-of-freedom systems. Lagrange's equations; transient and steady-state vibrations; eigenvalue analysis for natural frequencies and normal modes; analysis and stability of structural components (including beams, cables and large systems inshore, offshore, and in space). Time-domain vs. frequency-domain analysis; classical approximate methods, Rayleigh method, Dunkerley's equation, Rayleigh-Ritz Method, Myklestad's Method for beams; introduction to random vibrations. Prerequisite: Matrix Methods in Structural Analysis (may be taken concurrently) or equivalent. Introduction to the Finite Element Method. Prerequisite: Matrix Structural Analysis or consent of instructor.

CEGR 635 Advanced Reinforced Concrete Design
Three Hours: 3 Credits
This course utilizes the mechanics of concrete and structural design principles to enable students to perform advanced design of reinforced concrete structures. It emphasizes the design for torsion, shear and shear friction, and teaches how to perform the design of two-way slabs, walls, reinforcement at joints, multistory columns and concrete building systems in accordance with the latest building code.
CEGR 636 Artificial Neural Networks I
Three Hours: 3 Credits
This course provides graduate students and engineering professionals with the fundamentals of Artificial Neural Networks. This course covers neural network architectures, algorithms, and applications. A wide variety of standard neural networks and training algorithms are covered in relationship to logic functions and other applications. Emphasis is on computational characteristics to illustrate similarities and differences among neural networks.

CEGR 638 Artificial Neural Networks II
Three Hours: 3 Credits
This is a computational course and applies object-oriented methodology to programming artificial neural networks. Knowledge gained from this course will enable students to perform advanced application and research in Civil Engineering. Topics to be discussed include pattern class, link-list class, neural network base classes, adaline network, back propagation neural network, self-organizing neural network, and bi-directional associative memory.

CEGR 651 Computer Aided Highway Engineering Design
Three Hours: 3 Credits
This course covers the operational, geometric and hydraulic design of highways to achieve safe and efficient vehicle operation under the conditions of uninterrupted flow.

CEGR 655 Traffic Engineering I
Three Hours: 3 Credits
The principles of traffic engineering involving the analysis, planning and design of loads, streets and highways, and their related networks. Coverage includes the dynamics of traffic flows, traffic studies, and data collection; capacity analysis of free ways and arteries; the analysis and design of traffic control systems, including signalized and unsignalized intersections.

CEGR 656 Transportation Models and Simulation Analysis I
Three Hours: 3 Credits
The theory, development and application of modeling systems commonly used in planning, engineering and operational analysis of transportation systems. The application and calibration of an existing transportation modeling system.

CEGR 657 Advanced Topics in Traffic Engineering
Three Hours: 3 Credits
Theory, analysis and design of coordinated traffic signal systems, traffic information systems and traffic management emphasizing area wide optimization, intermodal coordination and incident management.

CEGR 661 Airport Planning and Engineering
Three Hours: 3 Credits
The planning and design of airports and their supportive infrastructural systems. The operational analysis of airports and the environmental considerations in their location, design, expansion, and operation.

CEGR 663 Readings in Environmental Engineering
Three Hours: 3 Credits
This course is required to prepare students in doctoral dissertation. Selected topics from the current literature will include water and waster, air pollution, solid waste, hazardous wastes, ground water hydrology, hydraulics, etc. Prerequisites: Approval of instructor.

CEGR 665 Random Vibrations and Nonlinear Dynamics
Three Hours: 3 Credits
CEGR 670  Special Topics in Highway Safety  
Three Hours: 3 Credits  
This is an elective course which discusses highway safety and design issues. The design of horizontal and vertical alignments as well as transition curves is covered. The causes of highway accidents and their relations to highway design elements such as side slope, roadway width, and sight distance, as well as to human elements are thoroughly investigated. Analysis of high accident locations, accident reducing measures, and highway economics is also covered. Students are expected to complete a course project in the broad area of highway safety and design.

CEGR 671  Traffic Flow Theory.  
Three Hours: 3 Credits  
Advanced topics in traffic flow theory for non-interrupted and interrupted flows. Topics include speed flow and density; shock waves in traffic streams; gap acceptance. Queuing theory and probabilistic processes as applied in the analysis of interrupted traffic flows. Applications in highway, traffic signals and terminal systems design.

CEGR 673  Advanced Environmental Engineering Design  
Three Hours: 3 Credits  
Covers basic parameters and elements in design, development of design parameters, layout of design, hydraulic and/or pneumatic profiles, cost, and financing. Possible topics included water supply and sewage systems, pumping stations and pumping systems, wastewater treatment plants, air pollution controls, sanitary landfills, etc. This course is a design course that involves real-life projects that the students have selected from the proceeding list of topics and approved by the instructor.

CEGR 680  Highway Infrastructure Management Systems  
Three Hours: 3 Credits  
This course deals with the development of computerized maintenance management systems for the integrated management of transportation infrastructures. It addresses the requirements of Government Accounting Standard Board (GASB) Statement 34, required to be followed on transportation maintenance projects. Modeling and management of highway maintenance, bridge maintenance, and pavement maintenance are discussed. Depreciation of highway assets over time and correlation between highway maintenance and infrastructure security are covered.

CEGR 681  Theory of Traffic Flow  
Three Hours: 3 Credits  
Study and evaluation of various qualitative descriptions of the complex phenomenon of traffic flow. The concept and mathematical models considered are statistical relationships, car-following analogy, queuing theory, traffic-network analysis, computing machine simulation studies, mathematical experiments, and distribution-function theories.

CEGR 684  Advanced Algorithms in Transportation I  
Three Hours: 3 Credits  
An introduction to graphs and networks, their properties and values in systems analysis, identification and formulation of standard problems, and basic techniques available to solve them. Spanning trees, shortest paths, traveling salesman problem, routing and scheduling, facility location problems, flow problems, covers and matchings. Applications and decision analysis. Emphasis on problem identification, use of computer packages, and the relationship of network properties to solution efforts.

CEGR 685  Advanced Algorithms in Transportation II  
Three Hours: 3 Credits  
This is an advanced level transportation engineering course focusing on development and applications of various algorithms in transportation problem solving. It involves modeling and analysis of transportation network problems through the design, analysis, and implementation of algorithms. Emphasis is placed on the use of quantitative techniques of operations research to model system performance.

CEGR 686  Demand Analysis and Forecasting  
Three Hours: 3 Credits  
Analysis and forecasting of demand for facilities and services, for use in the planning, design, and operations of transportation systems. Emphasis on the collection and analysis of survey data for demand model development. Covers alternative sample designs, individual choice theories, probabilistic discrete choice models, estimation of desegregate and aggregate models, aggregate forecasting methods and simulation. Illustrated with applications from the field of transportation planning. Hands on exercises in the use of PC statistical analysis software.
CEGR 687  Ground Water Hydrology
Three Hours: 3 Credits
Theory of ground water movement, storage exploration, and pumping tests. Design of ground water recovery and recharge systems. Prerequisite: CEGR 510.

CEGR 688  Advanced Mechanics of Solids
Three Hours: 3 Credits
Mechanical response of materials, including elastic, plastic and viscoelastic components. Continuum mechanics; kinematics of deformation, analysis of states of stress and strain, conservation of mass, balance of momentum and energy, constitutive equations. Discussion of applications including stress concentrations at defects, metal processing, and composite materials. Prerequisite: Advanced Strength of Materials or consent of instructor.

CEGR 690  Adaptive Structures
Three Hours: 3 Credits
Behavior of engineering structures subject to induced internal deformations. Transduction devices and adaptive physical systems. Excitation and response of adaptive structures. Actuator placement and static control. Extension to the dynamic case and active vibration control.

CEGR 691  Spacecraft Dynamics and Control
Three Hours: 3 Credits
Altitude dynamics and control of spacecraft. Overview of spacecraft systems and orbit determination. Rigid body kinematics and dynamics, and linear control concepts. Active and passive stabilization of spacecraft. Altitude control subsystems and hardware components, and design technology. Illustrations with available real examples and applications.

CEGR 695  Discrete-Time Control Engineering
Three Hours: 3 Credits
Design of controllers for discrete-time systems, with emphasis on linear sampled-data control. Single-loop digital controllers. Discrete-time state space design. Discrete-time optimal control. Realization of microcomputer real-time control systems. Design problems and applications with hands-on experience. Prerequisite: A course in linear systems and control, or consent of the instructor.

CEGR 697  Geographic Information Systems Applications in Transportation
Three Hours: 3 Credits
This is a graduate level course focusing on Geographic Information Systems (GIS) application in transportation (GIS-T). GIS is an emerging technology and is widely used in real-world problem solving. The underlying concepts in GIS application as well as advantages of GIS over non-GIS methods will be discussed and covered, extensively. Students will be introduced to two GIS softwares: ArcView GIS and MapObjects. Integration of GIS with Visual Basic and Visual C/C++ will also be covered. Finally, a number of GIS applications in real-world problem solving will be shown.

CEGR 702  Seismic Design
Three Hours: 3 Credits
This course provides for the seismic design of buildings. Dynamic analysis of single and multi-degree-of-freedom elastic systems subjected to earthquake motions. Earthquake Design Spectra Analysis. Inelastic dynamic response analysis. Consideration of new building code requirements. Prerequisites: Advanced Steel Design, Structural Dynamics, CEGR 704 Innovations in Structural Steel Design (or equivalent courses) or permission of the instructor.

CEGR 703  Geometrically Nonlinear Structural Analysis
Three Hours: 3 Credits
This course provides a basic background in the theory of geometrically nonlinear structural analysis. Formation of geometric stiffness matrices. Nonlinear analysis of trusses, plane frames, space frames, membrane, and cable net structures. Development of three-dimensional beam-column theory. Prerequisites: Matrix Structural Analysis, Advanced Structural Mechanics, EEGR 505 Advanced Engineering Mathematics with Computational Methods (or equivalent courses) or permission of the instructor.
CEGR 704  Innovations in Structural Steel Design  
Three Hours: 3 Credits  
This course provides for the study of innovations in structural steel design. Ductile design concepts of steel structures and the systematic methods and applications of plastic analysis concepts required to describe the structural behavior associated with ductile design are presented. Design procedures and detailing requirements for ductile braced frames and ductile moment-resisting frames. Consideration of new building code requirements. Prerequisite: Advanced Steel Design (or its equivalent) or permission of the instructor.

CEGR 705  Mechanics of Composite Materials  
Three Hours: 3 Credits  

CEGR 709  Wave Propagation in Elastic Media  
Three Hours: 3 Credits  
Mechanical wave propagation in bounded and unbounded media. Wave reflection and transmission at interfaces and boundaries; stress waves. Additional topics of mutual interest to students and instructor.

CEGR 723  Advanced Consolidation Theory  
Three Hours: 3 Credits  
The fundamentals of soil consolidation theory are addressed in detail. Based on principles of continuum mechanics and constitutive relations, governing equations are derived for the deformation of the saturated skeletal frame. These in turn are tested against laboratory measurements. Unsolved problems in consolidation theory are emphasized.

CEGR 725  Aquifer Mechanics  
Three Hours: 3 Credits  
Emphasis on mechanical characteristics of pore flow and skeleton matrix within an aquifer system; motion of pore flow and aquifers, including vertical and horizontal movement of aquifers; interaction between pore flow and skeleton matrix of sedimentary material. Solving Environmental problems related to land subsidence and fissures due to ground fluid (gas, oil and water). Prerequisite: Soil Mechanics, Advanced Hydrology or Hydrodynamics of Groundwater, Math (PDE).

CEGR 726  Geosynthetics  
Three Hours: 3 Credits  
This course provides graduate students and engineering professionals with knowledge of geosynthetic materials and methods for application procedures in geotechnical and foundation engineering. Geotextiles, geogrids, geosynthetic clay liners, and geocomposites are among the geosynthetic topics of application and procedures. Designing with geosynthetics, application procedures, and specifications are topics of this course.

CEGR 730  Constitutive Laws in Geomechanics  
Three Hours: 3 Credits  
Fundamental concepts of stress and strain tensors, criterion of failures for geomaterials. Theory of elasticity, viscosity, and plasticity, and their combinations such as elasto-viscous, elasto-plastic models in geomechanics for clay and sand soils. Discussion of classic models in geomechanics and their applications to engineering. Prerequisites: Advanced Soil Mechanics, Continuum Mechanics, and Partial Differential Equations.

CEGR 731  Advanced Soil Mechanics I  
Three Hours: 3 Credits  

CEGR 737  Continuum Mechanics  
Three Hours: 3 Credits  
Emphasis on theoretical study of continuum mechanics including introduction to tensor analysis; analysis of stress and strain tensors; motion and deformation; conservation laws; constitutive laws. Applications to porous material or sedimentary material in geomechanics and geotechnical engineering. Prerequisite: Partial Differential Equations, Engineering Mechanics and Mechanics of Materials.
CEGR 738  Boundary Element Method in Geomechanics
Three Hours: 3 Credits
Theoretical concepts and principles of the Boundary Element Method (BEM) and applications to Geomechanics and Geotechnical Engineering. Establishment of conceptual, mathematical, numerical, and mechanical models. Time and spatial discretization. Solution of matrix equations and programming in FORTRAN and C. Applications of BEM to geomaterials which exhibit linear and nonlinear elastic, viscous, and elasto-plastic behavior. Applications of BEM to solve 2D and 3D problems in Geotechnical Engineering. Prerequisites: Mechanics of Materials, Soil Mechanics, Partial Differential Equations, Numerical Analysis, and Programming in FORTRAN or C.

CEGR 739  Discrete Element Method in Geomechanics
Three Hours: 3 Credits

CEGR 740  Special Topics in Geographic Information Systems (GIS)
Three Hours: 3 Credits
Advanced concepts, principles, and applications of GIS are presented and illustrated. Project design, data acquisition, management, analyses, and display/product generation will be emphasized. Applications of GIS methodologies in real world problems from various disciplines will also be presented. Student will be required to complete a GIS project as the final examination grade for the course. ESRI’s ARCINFO and Arc View will form the basic GIS software for the course. Prerequisites: Basic courses in Geographic Information Systems (GIS) and Remote Sensing or permission of the instructor.

CEGR 741  Special Course in Remote Sensing (RS)
Three Hours: 3 Credits
Advanced concepts, principles, and applications of RS are presented and illustrated. Project design, data acquisition, management, analyses, and display/product generation will be emphasized. Applications of RS methodologies in real world problems from various disciplines will also be presented. Student will be required to compete a RS project as a final examination grade for the course. ENVI and ERDAS will form the basic GIS software for the course. Prerequisites: Basic courses in Geographic Information Systems (GIS) or permission of the instructor.

CEGR 742  Geographic Information Systems (GIS) Modeling in Raster
Three Hours: 3 Credits
Advanced geographic information system (GIS) modeling concepts, principles, methodology, and applications are presented and illustrated. Map algebra, pattern recognition, model formulation, implementation and verification, and advanced raster data structures for dynamic modeling will be emphasized. Cross-disciplinary approaches of GIS modeling of real world problems will also be presented. Student will be required to complete a GIS modeling project, make an oral presentation, and submit a written report of their findings as part of the final grade for this course.

CEGR 743  Finite Element Method in Geomechanics
Three Hours: 3 Credits
Theoretical concepts and principles of the Finite Element Method (FEM) as well as applications to Geomechanics and Geotechnical Engineering. Establishment of conceptual, mathematical, numerical, and mechanical models. Time and spatial discretization. Solution of matrix equations and programming in FORTRAN and C. Applications of FEM to geomaterials which exhibit linear and nonlinear elastic, viscous, elasto-plastic behavior. Applications of FEM to solve 2D and 3D problems in Geotechnical Engineering. Prerequisites: Mechanics of Materials, Soil Mechanics, Partial Differential Equations, Numerical Analysis, and Programming in FORTRAN or C.

CEGR 744  Tensor Analysis in Geomechanics
Three Hours: 3 Credits
CEGR 745  Advanced Analysis of Slope Stability  
Three Hours: 3 Credits  
Study advanced concepts and principles in limit equilibrium theory. Analyze soil and rock slope stability with theoretical approaches as well as numerical methods (e.g., FEM and FDM). Apply the limit equilibrium theory to slope stability. Back analysis and its applications to prediction of potential failure of slope. Slope design and problem solving in Geotechnical and Geological Engineering.

CEGR 746  Advanced Soil Dynamics  
Three Hours: 3 Credits  
Emphasis on theoretical and applied study in soil dynamics including soil stress-strain relations, strength and failure under dynamic loading, loading rate effect, small and larger deformation under repeated loading propagation of stress wave in soils. Investigation of soil dynamic parameters through lab and field. Solving problems in engineering such as sand liquefaction due to earthquake, foundation stability analysis under vibration, wave propagation because of pile driving or earthquake, etc. Prerequisite: Soil Dynamics, Partial Differential Equations, Mechanics of Materials.

CEGR 747  Well Hydraulics  
Three Hours: 3 Credits  
This course emphasizes theoretical and applied well hydraulics including steady and unsteady flow toward a well within confined, semi-confined or unconfined aquifers. Analytical solutions of well draw down, analysis of aquifer parameters through aquifer testing, and applications to water resources exploitation are discussed.

CEGR 748  Design of Pile Foundations  
Three Hours: 3 Credits  
Study of theories and principles such as structure characteristics, load transfer mechanics, pile load tests, consolidation settlement of group piles, negative skin friction laterally loaded piles. Design of different types of pile foundations, estimate pile length and installation of piles.

CEGR 749  Earthquake Engineering  
Three Hours: 3 credits  
This course covers seismic wave and its propagation in porous media, analytical and numerical analysis for elastic, plastic and viscous waves, analysis of ground motion and field responses due to an earthquake, soil-structure interaction induced by earthquakes, soil liquefaction and site characterization, geotechnical designs with consideration of seismic forces.

CEGR 750  Advanced Geotechnical Experiments  
Three Hours: 3 Credits  
This course emphasizes advanced geotechnical experiments conducted in laboratories and fields, including designing and planning geotechnical tests, introduction to conventional and advanced laboratory and field equipment, data acquisition experiments, and stress analysis for experimental investigation.

CEGR 788  Seminar I  
One Hour: 1 Credit  
This is the first part of an advanced seminar course taken during the first two semesters of the Master of Engineering Program in which students from different engineering disciplines (Civil, Electrical, and Industrial Engineering) work together to identify and solve problems.

CEGR 789  Seminar II  
One Hour: 1 Credit  
This is the second part of an advanced seminar course taken during the first two semesters of the Master of Engineering Program in which students from different engineering disciplines (Civil, Electrical, and Industrial Engineering) work together to identify and solve problems.
CEGR 790  Research in Civil Engineering  
Three Hours: 3 Credits  
This course provides for independent inquiry into any civil engineering-related topic. Through a search of the appropriate literature, the student can gain depth in a particular subject area or breadth in other fields related to civil engineering. At the commencement of the semester, a student must submit an outline of the proposed work for approval of the supervising faculty member and the chair of the department. A written report is required.

CEGR 794  Project Guidance  
One Hour: 1 Credit  
Project guidance provides students who have not completed their project in the assigned semester a mechanism for continuing their work under faculty supervision.

CEGR 795  Project Report I  
Two Hours: 2 Credits  
Project Report I provides a student with an opportunity to formulate a proposal for a professional engineering project. The student may work as a project at the University or off-site, under the supervision of a faculty advisor.

CEGR 796  Project Report II  
Two Hours: 2 Credits  
Project Report II follows up on the approved project proposal developed in CEGR 795. Under the supervision of a faculty advisor, the student must address advanced professional engineering issues, which may include analysis, design, synthesis, feasibility, development of alternatives, standards and codes, and other relevant issues as defined in Project Report I. This professional engineering experience culminates in a final report.

CEGR 997  Dissertation Guidance  
Three Hours: 3 Credits  
Dissertation guidance provides students, who have not completed their dissertation in the assigned semester, a mechanism for continuing their work under faculty supervision.

CEGR 998  Dissertation Seminar  
Six Hours: 6 Credits  
Dissertation seminar provides for the overall guidance of a doctoral student by the Doctoral Advisory Committee in the preparation of the dissertation. In particular, the Major Advisor, who is also Chair of the Doctoral Advisory Committee, provides direct and continuous guidance in the development of a proposal, proposal defense, research implementation, and dissertation defense.
ELECTRICAL AND COMPUTER ENGINEERING

EEGR 505 Advanced Engineering Mathematics with Computational Methods
Three Hours: 3 Credits

EEGR 507 Applied Probability and Statistical Analysis
Three Hours: 3 Credits

EEGR 508 Advanced Linear Systems
Three Hours: 3 Credits
This course focuses on fundamental concepts for the analysis of linear systems in the discrete and continuous domains. A discussion of core topics in linear algebra for the analysis of systems of equations, including matrix representations of linear operators, eigenvector-eigenvalue analysis, and the Cayley-Hamilton theorem will be covered. Additionally, topics in system theory including system stability, controllability and observability will be discussed.

EEGR 510 Communications Networks
Three Hours: 3 Credits
An introduction to communication networks. Includes the OSI layering model of networks with emphasis on the physical, data link, and network layers; and network topologies. Introduction to a variety of computer, satellite, and local-area communication networks, including Ethernet, Internet, packet radio, and the telephone network.

EEGR 520 Digital Image Processing
Three Hours: 3 Credits
This course covers topics relevant to the understanding, feature extraction, and modification of images. Included in this course will be the necessary theoretical background as well as practical exercises in image processing. Topics include 2-D system theory, image transforms, image analysis, image enhancement and restoration, image coding, automatic pattern recognition, image processing hardware and software.

EEGR 522 Digital Signal & Speech Processing
Three Hours: 3 Credits
The course covers of digital signal processing and an introduction to techniques for speech signal processing. Includes: linear predictive coding (LPC), pattern recognition, compression, speech physiology, and other topics of interest.

EEGR 532 Microwave Transmission
Three Hours: 3 Credits
This course will cover the fundamental concepts of Maxwell’s equations, wave propagation, network analysis, and design principles as applied to modern microwave engineering. Topics include planar transmission lines, bipolar and field effect transistors, dielectric resonators, low-noise amplifiers, transistor oscillators, PIN diode control circuits and monolithic integrated circuits.

EEGR 560 Computer Networks
Three Hours: 3 Credits
ISO open systems reference model, protocol layers, TCP/IP, channel coding, data communication concepts, local area network (LAN) topologies and transmission media, queuing theory applied to LAN performance modeling, LAN access techniques, network interconnection, network reliability, network security, performance analysis of ring and bus topology networks, reliability of fiber optic ring networks.
EEGR 562  Computer Architecture, Networks, and Operating Systems  
Three Hours: 3 Credits  
Quantitative basis of modern computer architecture, processor designs memory hierarchy, and input/output methods. Layered operating system structures, process and storage management Layered network organization, network protocols, switching, local and wide area networks. Examples from Unix and the Internet.

EEGR 570  Advanced Digital System Design  
Three Hours: 3 Credits  
Introduces alternative means by which a logic system may be realized and the variety of technologies available. Reviews logical factors of digital systems and the architecture of FPGAs along with the options and trade-offs for diverse approaches. Small and modest sized design implementations on different FPGA architectures will be covered.

EEGR 575  Software Engineering: Systems Implementation  
Three Hours: 3 Credits  
Implementation aspects of software engineering; Programming languages; architectural designs; program design; structured programming; peripheral storage devices; I/O programming, debugging and evaluation.

EEGR 605  Digital Communications  
Three Hours: 3 Credits  
Digital Communications Systems is a foundation course for digital communications. It provides a brief review of signals, probability, stochastic processes and information theory followed by the development of source encoding, modulation systems, optimum receiver design, demodulation systems, and error correction coding. Special topics will be included based on time available and student interest.

EEGR 607  Information Theory  
Three Hours: 3 Credits  
This course presents measures of information, information sources, coding for discrete sources, the noiseless coding theorems, Huffman coding, channel capacity, the noisy-channel coding theorems and block and convolutional error-control coding and decoding techniques.

EEGR 608  Error Control Coding  
Three Hours: 3 Credits  
This course includes a review of information theory with the theory and design of error detection and correction schemes. Includes block and convolutional codes, interleaving, ARQ schemes, error detection schemes, and a variety of applications on wired and wireless networks.

EEGR 610  Wireless Communications  
Three Hours: 3 Credits  
This course presents current techniques on wireless digital communications, such as wireless channel modeling, channel distortion due to multipath and Doppler, digital modulation and demodulation (MODEM) techniques, and multiple access methods including TDMA, FDMA and CDMA systems.

EEGR 612  Multi User Communications  
Three Hours: 3 Credits  
Review of network architectures using OSI layering strategies. Includes Queueing theory application to various queues; and reservation, polling, and token passing systems. Protocol designs for radio multichannel networks with various contention strategies. Local area network protocols, performance and strategies.

EEGR 614  Queueing Networks  
Three Hours: 3 Credits  
Addresses the fundamentals of stochastic processes and queuing theory. Includes Poisson processes, Markov chains, renewal processes, tandem queues, networks of queues, priority and bulk queues, computational methods, and simulation. Application and performance with a variety of computer and communications applications.
ELECTRICAL & COMPUTER ENGINEERING - COURSE DESCRIPTIONS

EEGR 615  High Speed Networks
Three Hours: 3 Credits
Introduction to the design of high data rate, integrated services protocols that designed for high speed multi media applications such as video, voice, data and internet traffic. The TCP/IP, IEEE802.x LAN, and Asynchronous Transfer Mode (ATM). Introduction to Routing and Queuing Theory is included. Topics include switching architectures, network management and control.

EEGR 620  Digital Image Processing
Three Hours: 3 Credits
This is an introduction course on the fundamentals of digital image processing with an emphasis on signal processing. Topics included: image formation, images transforms, image enhancement image restoration, image reconstruction, image compression, image segmentation and image representation.

EEGR 622  Adaptive Signal Processing
Three Hours: 3 Credits
This course addresses adaptive digital signal processing for applications such as equalization and array processing. Emphasizes the theory and design of finite-impulse response adaptive filters including stochastic processes, Weiner filter theory, the method of steepest descent, adaptive filters using gradient-methods, analysis of the LMS algorithm, least-squares methods, recursive least squares, and least squares lattice adaptive filters.

EEGR 623  Pattern Recognition
Three Hours: 3 Credits
This course addresses the general pattern classification problem. It includes: statistical decision theory, multivariate probability functions, discriminants, parametric and nonparametric techniques, Bayesian and maximum likelihood estimation, feature selection, dimensionality reduction, transformations, and clustering.

EEGR 624  Detection and Estimation Theory
Three Hours: 3 Credits
This is a course on statistical decision theory, modeling of signals and noise, detection of various signals, and statistical estimation theory. Includes decision criteria, hypothesis testing, receiver operating characteristics, detection of signals with unknown parameters, performance measures, Cramer Rao bounds, and optimum demodulation.

EEGR 625  Optical Communication
Three Hours: 3 Credits
Includes the characteristics of light as used in communications systems including propagation of rays in waveguides, scalar diffraction theory, optical information processing systems, quantum statistical communication theory, heterodyning and receivers.

EEGR 626  Optimization/Numerical Methods
Three Hours: 3 Credits
This course investigates both classical deterministic optimization techniques and stochastic optimization techniques. The classical techniques will include linear and non-linear programming, steepest descent, and Newton-Raphson methods. Stochastic methods will include Robbins-Monro gradient-based stochastic approximation and the simultaneous perturbation stochastic approximation algorithms. Application cases will be included throughout the course, including neural-network training, nonlinear control, sensor configuration, image processing, and discrete-event systems. Simulation-based optimization and computer-based homework will be given.

EEGR 632  Automated Measurements, Devices & Systems
Three Hours: 3 Credits
This course will consider microwave active circuits utilizing semiconductor devices. Circuits using unipolar (FETs), bipolar (Transistor), and diode devices will be examined. Linear amplifier analysis techniques including unilateral gain, maximum available gain, noise figure circles, and stability circles will be covered. Students will be introduced to the fundamentals of high-frequency measurements and the latest techniques for accuracy-enhanced microwave measurements. Automated network analyzers and high-speed wafer probes are used in conjunction with state-of-the-art calibration techniques. Microwave computer-aided analysis and design tools will be used to evaluate active circuits. None-linear modeling of active devices will be introduced.
EEGR 634  Computational Electromagnetics
Three Hours: 3 Credits
The finite-element method (FEM), the finite-difference (FD), the finite-difference-time-domain (FDTD), and the method of moments (MoM) are versatile tools that find important applications in electromagnetic engineering. This course will focus on several electromagnetic field equations, such as Laplace’s, Poisson’s, and Helmholtz’s equations, and the related numerical techniques for their approximate solutions to problems for which closed-form solutions may not be obtained.

EEGR 635  Advanced Electromagnetic Theory
Three Hours: 3 Credits
This course is a first-year graduate course on electromagnetic theory and applications. Topics include Stokes parameters, Poincaré sphere, gyrotropic media, uniaxial media, phase matching, layered media, dielectric waveguides, metallic waveguides and resonators, Cerenkov radiation, Hertzian dipole, equivalence principle, and reciprocity.

EEGR 636  Quantum Mechanics
Three Hours: 3 Credits
This is a survey course on quantum mechanics that covers a broad range of topics that are useful to students in electrical and computer engineering such as: Lagrangian and Hamiltonian equations, Schrödinger equation, wave packets, particle in a box, tunneling of particles, Dirac’s description of quantum mechanical states and matrix formulation of quantum mechanics, and perturbation theory.

EEGR 640  Advanced Solid State Electronics
Three Hours: 3 Credits
This course will focus on the fundamentals of solid state physics as it applies to electronic materials and devices. A discussion of core topics including bulk material properties and recent developments in low-dimensional semiconductor structures, such as heterostructures, superlattices and quantum wells will be covered. Additionally, various material growth and device fabrication techniques will be discussed.

EEGR 642  Semiconductor Fabrication Technology
Three Hours: 3 Credits
An overview of the fundamental principles of semiconductor fabrication technology is presented. It covers both the practical and the theoretical aspects including the use of predictive engineering tools. Topics include basic material review; methods of oxidation; methods of deposition/diffusion and ion implantation, principles of epitaxial deposition/ growth, photolithographic technology, chemical vapor deposition/nitride, silicon dioxide, metallization technology, evaporation/sputtering; and electrical inline wafer testing.

EEGR 643  Advanced Semiconductor Characterization
Three Hours: 3 Credits
This course is an advanced approach to the measurement of physical principles underlying semiconductor device operation. This concept is reinforced through the application of these measurements to specific devices. Topics include measurement techniques of the critical relevant physical parameters in semiconductor material and device structures such as: impurity profiling, carrier transport, and deep and shallow level trap characterization.

EEGR 645  Optical Engineering
Three Hours: 3 Credits
This course presents the engineering concepts necessary to understand and evaluate optical systems. It begins with a brief but rigorous treatment of geometric optics, including matrix methods, aberrations, with practical examples of optical instruments and electro-optical systems. Other topics include polarization, interference, diffraction, and optical properties of crystals, thin-films, optical resonators, guided waves, modulators and detectors. The concepts are presented with examples from modern optical systems such as fiber-optical sensors, rangefinders, infrared systems, and optical communication systems.

EEGR 660  Computer Architecture and Design
Three Hours: 3 Credits
Principles and advanced concepts and state-of-the-art developments in computer architecture: memory systems, pipelining, instruction-level parallelism, storage systems, multiprocessors, relationships between computer design and application requirements, and cost/performance tradeoffs. Additional topics include particular emphasis will be placed on architectures for DSP applications.
EEGR 662 Parallel Processing Architecture
Three Hours: 3 Credits
This course addresses fundamental issues in the design and use of large-scale multiprocessors. Both software and hardware issues are addressed. In the software area, the course will examine parallel applications and their computation requirements, including how they are expressed using parallel programming languages. The course will also look at runtime software that provides the system-level support needed in a parallel architecture. In the hardware area, the course will examine all facets of the design of multiprocessors, including processor support for parallelism, memory system design, and interconnection networks.

EEGR 664 Introduction to Parallel Computation
Three Hours: 3 Credits
Motivation for parallel processing, technological constraints, complexity, performance-characterization, communications, interconnection networks, reconfiguration and fault tolerance, systolic arrays, memory systems, large-bandwidth input/output, disk arrays, on-line visualization, coarse and fine-grain processor design, parallel FORTRAN and C, finite-difference and finite-elements, parallel optimization and transformation algorithms, selected signal and image processing applications, selected architectures: DAP, NCUBE, CM-2, and MasPar.

EEGR 666 Parallel Algorithms
Three Hours: 3 Credits
The design and analysis of efficient algorithms for parallel computers. Fundamental problem areas, such as sorting, matrix multiplication, and graph theory, are considered for a variety of parallel architectures. Simulations of one architecture by another.

EEGR 668 Topics in Networking and Network Applications
Three Hours: 3 Credits
We will discuss how existing and emerging data communication technologies can meet special application requirements. The course covers LAN and WAN Technologies, Bridging, Switching, Routing, Networking Protocols, Management, Design and Security as well as Multicast, Videoconferencing, Multimedia Collaboration Technologies and Audio/Video compression and coding. The course material is designed as an introduction to the field and a practical guide for designing and planning networks. Note that the word “topics” in the title means that the course content will vary to reflect current or interesting topics and applications in the field.

EEGR 670 DSP VLSI Design
Three Hours: 3 Credits
DSP VLSI architecture and algorithms; design strategies; design methodologies; system-level design; area/delay/power trade-offs; high performance systems; multi-chip modules; low-power design; hardware/software co-design; design for testability, design for manufacturability; algorithm, architecture, and component design for adaptive computing systems; prototype system development and test, possible chip fabrication by MOSIS and subsequent chip testing.

EEGR 675 Computer Vision
Three Hours: 3 Credits
Image formation and visual perception. Images, line structure, and line drawings. Preprocessing, boundary detection, texture, and region growing. Image representation in terms of boundaries, regions, and shape. Three-dimensional structures and their projections. Analysis, manipulation, and classification of image data. Knowledge-based approaches to image understanding. Applications from fields of robot vision, biomedical-image analysis, and satellite and aerial image interpretation.

EEGR 677 Object Oriented Analysis and Design: Modeling, Analysis, and Optimization of Embedded Software
Three Hours: 3 Credits
Modeling, Analysis, and Optimization of Embedded Software. Current techniques in software engineering with topics selected from economics, reusability, reliable software, program analysis, reverse engineering, CASE tools, automatic code generation, and project management techniques.

EEGR 679 Security in Network and Link Applications
Three Hours: 3 Credits
Security Architecture for open, closed and mixed network topologies. Introduction to security mechanism design and implementation.
EEGR 680 Switching Theory: High Speed Networks
Three Hours: 3 Credits
This course reviews the development and performance of state-of-the-art switching architectures of broadband networks based on the current standards. Of particular interest will be networks based on the ATM standard because of their gaining global popularity for flexibility in providing integrated transmission of sound, image and data signals.

EEGR/CEGR 695: Discrete-Time Control Engineering
Three Hours: 3 Credits

EEGR 710 Wireless Communications II
Three Hours: 3 Credits
This is an advanced topic in wireless which encompasses advanced signal processing and communications techniques applied to wireless applications including: Spread Spectrum, adaptive equalization, rake receiver design, multiple access schemes, wireless protocols and wireless networks. Applications include cellular, satellite, wireless LAN, and wireless internet.

EEGR 715 Advanced Topics in Communications
Three Hours: 3 Credits
This course will address selected advanced topics on this subject that are of interest to the students and instructor.

EEGR 720 Advanced Topics in Signal Processing
Three Hours: 3 Credits
This course will address selected advanced topics on this subject that are of interest to the students and instructor.

EEGR 722 Advanced Topics in Image Processing
Three Hours: 3 Credits
This course will address selected advanced topics on this subject that are of interest to the students and instructor.

EEGR 725 Advanced Topics in Control Theory
Three Hours: 3 Credits
This course will address selected advanced topics on this subject that are of interest to the students and instructor.

EEGR 730 Special Topics in Microwave Engineering
Three Hours: 3 Credits
This course will address selected advanced topics on this subject that are of interest to the students and instructor.

EEGR 732 Special Topics in Electromagnetics
Three Hours: 3 Credits
This course will address selected advanced topics on this subject that are of interest to the students and instructor.

EEGR 740 Special Topics in Solid State and Optical Electronics
Three Hours: 3 Credits
This course will address selected advanced topics on this subject that are of interest to the students and instructor.

EEGR 742 Special Topics in Microelectronics
Three Hours: 3 Credits
This course will address selected advanced topics on this subject that are of interest to the students and instructor.

EEGR 760 Special Topics in Computer Engineering
Three Hours: 3 Credits
This course will address selected advanced topics on this subject that are of interest to the students and instructor.
EEGR 788  Seminar I  
One Hour: 1 Credit  
This is the first part of an advanced seminar course taken during the first two semesters of the master of engineering program in which students from different engineering disciplines (Civil, Electrical, and Industrial Engineering) work together to identify and solve problems.

EEGR 789  Seminar II  
One Hour: 1 Credit  
This is the second part of an advanced seminar course taken during the first two semesters of the master of engineering program in which students from different engineering disciplines (Civil, Electrical, and Industrial Engineering) work together to identify and solve problems.

EEGR 790  Independent Study  
2 to 6 Credits  
The course of Independent Study is a program of research consisting of directed reading and/or laboratory work under the direction of a graduate faculty member. The program of study will be performed in accordance with an agreed upon plan and culminate in a report or paper. This course can be taken for 2 to 6 credits consistent with the proposed effort.

EEGR 795  Project Report I  
Two Hours: 2 Credits  
Project report I is to let students learn how to prepare a real project. This course emphasizes the continued analysis and the design of a specific electrical engineering problem under the guidance of a faculty advisor.

EEGR 796  Project Report II  
Two Hours: 2 Credits  
Project report II is to let students learn how to conduct a real project. This course emphasizes the continued analysis and the design of a specific electrical engineering problem under the guidance of a faculty advisor.

EEGR 797  Thesis Guidance  
Two Hours: 2 Credits

EEGR 799  Thesis Seminar  
Three Hours: 3 Credits

EEGR 997  Dissertation Guidance  
Three Hours: 3 Credits  
Dissertation guidance provides students who have not completed their dissertation in the assigned semester, a mechanism for continuing their work under faculty supervision.

EEGR 998  Dissertation Seminar  
Six Hours: 6 Credits
INDUSTRIAL ENGINEERING - COURSE DESCRIPTIONS

INDUSTRIAL, MANUFACTURING & INFORMATION ENGINEERING

IEGR 500 Mathematical Programming  
Three Hours: 3 Credits  
Introduction to construction of deterministic mathematical models. Mathematical techniques such as linear programming, dynamic programming, integer programming, and game theory. Applications are made to production, transportation, assignment, and resource allocation problems.

IEGR 502 Object-Oriented Analysis and Design  
Three Hours: 3 Credits  
Introduction to the principles of Object-Oriented Analysis and Design (OOAD) applied to Software Engineering. Introduction to systems analysis and design theory by using object-oriented methodologies. The OOAD methodology in conjunction with use-case methods, and analysis, model and simulation of software applications.

IEGR 510 Production Sequencing and Scheduling  
Three Hours: 3 Credits  
Analysis of sequencing and scheduling activities. Static and dynamic scheduling problems applied to single and multimachine models, heuristic models, rule-based models and simulation studies of priority dispatching rules, priority queuing models.

IEGR 511 Advanced Engineering Economy  
Three Hours: 3 Credits  
Topics include measuring economic worth, economic optimization under constraints, analysis of economic risk and uncertainty, foundations of utility theory, and econometric models.

IEGR 512 Advanced Project Management  
Three Hours: 3 Credits  
This is a study of project management theory and practices, emphasizing the strategic management for engineering activities. The concept of project planning and organization project life cycle project scheduling, organizational forms and conflict resolution will be addressed. The use of cost and time value of money, schedule and technical planning and control methods such as WBS, and network models as AOA, AON, CPM/PERT will be stretched. Proposal writing and the use of project management software tools for creating a typical project plan will be explored.

IEGR 515 Engineering Optimization  
Three Hours: 3 Credits  
Introducing and developing the practical aspects of optimization methods focusing on techniques and strategies useful in engineering design, operations and analysis. Survey of the important families of optimization methods. Topics include functions of single and several variables, constrained optimality criteria, transformation methods, constrained direct search, linearization methods for constrained problems, direction generation methods, quadratic approximation methods, structured problems, comparison of constrained optimization methods, strategies for optimization studies. Case studies include optimal design of a compressed air energy storage system, design of natural gas pipeline, and optimization of ethylene glycol-ethylene oxide process.

IEGR 516 Applied Decision Analysis  
Three Hours: 3 Credits  
Bayes Theorem, Bayesian estimators, utility functions, loss functions, risk analysis, minimax strategies, game theory, multiple criteria decision making. Problems in social and public decision making, values and preferences, subjectivity measurement, and Pareto optimality, group decision analysis, social decision processes and strategy of conflicts.

IEGR 530 Advance Simulation  
Three Hours: 3 Credits  
An up-to-date treatment of all the important aspects of simulation study, including modeling, simulation languages, validation, and output data analysis. Topics include selecting input probability distribution, random number generators, generating random variables, output data analysis, statistical techniques for comparing alternative systems, validation of simulation models, variance reduction techniques, and experimental design and optimization.
IEGR 531   Quality Management and Statistical Process Control  
Three Hours: 3 Credits  
This course provides useful managing tools for quality in manufacturing and service industries. The course covers quality control and statistical process control (SPC) including control charts and sampling plan design, six sigma approach and process capability analysis, total quality management (TQM), introduction to ISO 9000, quality philosophies of Deming, Juran and Taguchi. Prerequisite: Engineering statistics or equivalent.

IEGR 534   Engineering Statistics & Modeling  
Three Hours: 3 Credits  
Sampling distributions, estimation, maximum likelihood estimation, confidence intervals, regression, goodness of fit, correlation, tests of hypotheses, nonparametric statistics, introduction to analysis of variance (ANOVA) and design of experiments.

IEGR 535   Engineering Experimental Design  
Three Hours: 3 Credits  
Analysis and application of standard experimental design, including factorials, randomized block, latin square, confounding and fractional replication multiple comparisons. Fractional factorials, analysis of unbalanced data, and covariance models. Introduction to response surface methodology.

IEGR 539   Robust Design by Quality Engineering  
Three Hours: 3 Credits  
System design, parameter design, and tolerance design. Quality loss function, orthogonal arrays. Quality improvement by design. Making products insensitive to manufacturing variations, environmental variations and deterioration overtime. Introduction to TQM, QFD, JIT.

IEGR 550   Human Performance Engineering  
Three Hours: 3 Credits  

IEGR 555   Artificial Intelligence Programming  
Three Hours: 3 Credits  
Introduction to Lisp programming, early AI programs that use rule-based pattern matching techniques advance AI programs. Topics include building software tools, symbolic mathematics, logic programming, object-oriented programming, knowledge representation and reasoning, expert systems and natural languages.

IEGR 560   Assembly Automation & Product Design  
Three Hours: 3 Credits  
Analysis of the product design for ease of automatic assembly, automatic assembly transfer systems, automatic feeding and orienting-vibratory feeders, automatic feeding and orienting-mechanical feeders, feed tracks, escapements, parts-placement mechanisms, performance and economics of assembly systems, design for manual assembly, product design for high-speed automatic assembly and robot assembly, printed circuit board assembly, and feasibility study for assembly.

IEGR 562   Rapid Prototyping  
Three Hours: 3 Credits  
Fundamental concepts in the development of computational algorithms for the design of machine components and assemblies, and other engineering systems. Methodologies of ideageneration and refinement; Computer-assisted Rapid Sketching methods; general purpose computer programs for engineering analysis and design; Solid modeling techniques and parametric modeling for manufacturing; Analysis of trajectory from idea-generation to prototype production; representation of the design process as a network of decision tables and logical flags; introduction to stereo-lithography.

IEGR 563   Nontraditional Manufacturing Processes  
Three Hours: 3 Credits  
This course is designed to provide an assessment of the state of the art in the design tools and techniques in the area of non-traditional manufacturing. The students will be exposed to practical applications of non-traditional manufacturing, including use of wire electro-discharge machining and computer-assisted numerical control programming.
IEGR 570 Advanced Instrumentation Techniques  
Three Hours: 3 Credits  
Pressure and sensors; laser holography; laser doppler velocimetry; anemometry signal conditioning, use of amplifiers with shielding and grounding techniques; digital techniques; signal multiplexing, use of microcomputers; sampling techniques, error analysis and data handling; data acquisition methods; hardware and software review.

IEGR 571 Advanced Internal Combustion Engine  
Three Hours: 3 Credits  
Main phases of Otto cycle, Spark-ignition internal-combustion engine, Combustion and detonation; Carburetion and fuel injection, application of reciprocating piston engine, optimal design of triangular rotor (or rotary piston), optimal arrangement of intake, exhaust, and ignition mechanisms, exhaust emissions, fuel economy, and reliability.

IEGR 572 Design & Analysis of Energy Systems  
Three Hours: 3 Credits  
Elements in design analysis of energy systems, system designs involving heat reservoirs and work reservoirs, selection of fluid flow equipment, heat exchanges designs options, availability analysis, system flowsheeting, economic evaluation/cost estimation, optimal design techniques, and energy systems simulation.

IEGR 573 Applied Thermodynamics & Combustion  
Three Hours: 3 Credits  

IEGR 574 Heating, Ventilating, Air Conditioning (HVAC), & Energy Conservation System  
Three Hours: 3 Credits  
Air conditioning and environmental control, heat transmission in building structure, space heat load and cooling load, room and building air distribution, Principal of psychometrics, mass transfer and measurement of humidity, direct contact heat/mass transfer, refrigeration, renewable/exhaustible energy sources, energy conservation/legislation, cogeneration/heat reclamation, Design, installation and operation computer controlled Energy Management Systems Automation.

IEGR 575 Computer Integrated Manufacturing  
Three Hours: 3 Credits  
Overview of the functions, processes, and disciplines of computer-integrated manufacturing. Topic include automation and computer integrated manufacturing, computer aided process planning, group technologies, hierarchical computer control, information systems and processing, computer communications systems and software, computer networks, design, assembly, machining and control nodes. Current issues, emerging technologies, and future developments in computer integrated manufacturing.

IEGR 576 Principles of Manufacturing Information System  
Three Hours: 3 Credits  
Introduction to the theory and concepts of information for manufacturing organization and management of information within a manufacturing enterprise, database systems, information-based planning and management tools, electronic data interchanges. Design of manufacturing systems such as MRP, SERS, CAD/CAM, etc. Concerns of integration machine interface in manufacturing systems.

IEGR 577 Computational Heat and Fluid Engineering  
Three Hours: 3 Credits  
Engineering applications of computational heat and fluid engineering, computational methodology for the closed/open systems, heat balance and loss in circular pipes, variation of atmospheric by inviscid flows are outlined and the relevant numerical methods are introduced.
IEGR 585  Occupational Safety Engineering  
**Three Hours: 3 Credits**  
Design and modification of machinery and products to eliminate or control hazards arising out of mechanical, electrical, thermal, chemical, and motion energy sources. Application of retrospective and prospective hazard analysis, systems safety performance and measurement, accident prevention philosophies, expert systems and accident reconstruction methodologies. Case studies include industrial machinery and trucks, construction and agriculture equipment, and automated manufacturing systems and processes.

IEGR 595  Engineering for Profit  
**Three Hours: 3 Credits**  
This is an interdisciplinary course in the development and application of tools, methods, and resources to provide engineering students with an entrepreneurial look at the business side of the engineering profession.

IEGR 605  Integer Programming and Network Models  
**Three Hours: 3 Credits**  
Network flow models and applications. Algorithms for the shortest path, minimum cost flow and maximum flow problems. Integer programming models and formulation. Computational complexity of integer programming problems. Lagrangean duality theory, branch and bound techniques, cutting planes and hybrid algorithms. Application of these methods to facility location and traveling salesman problems. Study of special techniques for selected topics such as vehicle routing, set covering and network design problems.

IEGR 615  Advanced Engineering Optimization  
**Three Hours: 3 Credits**  
Techniques and strategies useful in engineering design, operation, and analysis. This course introduces and develops the practical aspects of optimization methods at a level suitable for engineers.

IEGR 620  Nonlinear Programming  
**Three Hours: 3 Credits**  
Theoretical development of solution methods in nonlinear programming including manifold suboptimization, convex simplex, reduced gradient, gradient projection, feasible direction, cutting plane, and penalty function methods. Investigation of convergence of algorithms. Methods of solution for integer programming problems including cutting plane methods, enumerative techniques, and dynamic programming methods.

IEGR 625  Stochastic Processes  
**Three Hours: 3 Credits**  
A survey course of stochastic processes with an emphasis on applications in engineering, management science, and physical sciences. Topics covered include random walk, Markov and Poisson processes, renewal theory, and stationary processes, illustrated with examples in queuing theory, inventory control, time series and random noise.

IEGR 635  Advanced Robust Design  
**Three Hours: 3 Credits**  
This course will provide useful techniques for product and manufacturing process design. It has three basic steps: system design, parameter design, and tolerance design. Quality can be built into product into products through design. The methodology is based upon quality loss function, experimental design and orthogonal arrays, etc. Prerequisite: IEGR 535 or equivalent.

IEGR 636  Time Series Analysis and Forecasting Systems  
**Three Hours: 3 Credits**  
Time and frequency domain aspects of time series are developed in a mutually reinforcing fashion. Behavior patterns of time series are examined with a view toward model identification and forecasting. The statistical procedures for model estimation are presented and employed. Multiple time series concepts and problems are introduced. The BoxJenkins approach is emphasized.
IEGR 640  Reliability  
Three Hours: 3 Credits  
Probabilistic models underlying reliability and life testing analysis. Structural and reliability properties of coherent systems, exact system reliability and approximation, parametric families of life distribution and their characterizing models, homogeneous and nonhomogeneous Poisson processes, mixtures of distributions, competing risk and multiple failure mode models, accelerated life testing models, regression and partial likelihood models, types of censoring, multiple failure mode analysis. Inference procedures, including graphical analysis for various parametric models and for complete and censored samples. Applications in engineering, biometry, and actuarial science.

IEGR 655  Quantitative Methods in Systems Engineering  
Three Hours: 3 Credits  
Development and use of efficient quantitative methods in Systems Engineering, Systems Analysis and Operations Research. Providing an understanding of the systems view of a product, service, or process to include a generic representation of its elements and dynamics

IEGR 660  Occupational Biomechanics  
Three Hours: 3 Credits  
Introduction of the mechanical behavior of the musculoskeletal system as related to physical work activities in industry. Fundamentals of human body mechanics, physical fatigue and musculoskeletal injury mechanism with application to design of physical work activities.

IEGR 662  Rapid Prototyping II  
Three Hours: 3 Credits  
Students, individually or in groups, develop a small-scale rapid prototyping team to address the need for a rapid prototype of a component or set of components relevant to an engineering subject. Students are given a fixed budget and a target time for completion of prototype. Problem identification, ideation and refinement; problem analysis; decision processes; advanced sketching and computer-aided design; applications of advanced solid-modeling, using a robust parametric modeler; introduction to graphical file transfer protocols for sharing design information among team members; advanced prototype production methods; production of prototypes using as stereolithography system.

IEGR 663  Nontraditional Manufacturing Processes  
Three Hours: 3 Credits  
Analysis of the processes, sensors, machine tools, and control systems in nontraditional manufacturing processes. Processes include abrasive jet machining, water jet machining, abrasive water jet machining, abrasive flow machining, ultrasonic machining, ultrasonic welding, high energy rate forming, electrochemical machining, electrochemical grinding, electrochemical discharge machining, electrostream drilling, shaped-tube electrolytic machining, chemical machining, electrical discharge machining, electrical discharge wire cutting, electrical discharge grinding, electron beam welding, electron beam machining, laser processing, plasma arc cutting, and thermal energy (deburring) method.

IEGR 670  Advanced Production & Operations Management  
Three Hours: 3 Credits  
An advanced study of production management techniques applied to control the operation of production and manufacturing systems. Advanced theories and practices of forecasting and inventory control including definitive, statistical and mixed behavior. The planning process will be approached at the aggregation of a master production schedule will be intensively explored including the unique approach of MRP. Methods of Operation sequencing and scheduling techniques under resource constraints including BHR&S. The future of production analysis and control with the use of recent developments in FMS, ASIRS, AGVS theories and applications.

IEGR 678  Engineering Design Process  
Three Hours: 3 Credits  
Definition of design, the design process and its considerations, managing design projects, modeling and simulation, design analysis for material selection, economic analysis in design, optimization in design, statistical decisions, design for reliability, safety and environmental protection, engineering ethics characterization.
IEGR 680  Advanced Product Design  
Three Hours: 3 Credits  
This course will provide determination of feasibility of design idea, and decision processes for choosing better design alternatives. Case studies will include the planning and creation of successfully engineered designs.

IEGR 686  Industrial Engineering Applications in Health Systems  
Three Hours: 3 Credits  
Description of the health care system and its resource components, accessibility, availability, distribution, and cost. Health system inputs, processes, and outputs. Applications of industrial engineering to health care management problem. Hospital management, forecasting, managerial control, facility planning, resource allocation and information systems.

IEGR 690  Enterprise Resource Planning  
Three Hours: 3 Credits  
The various topics include MRP (Material Requirements Planning), MRP II (Manufacturing Resources Planning), and Flow Manufacturing, Time as a competitive weapon (TCW) Theory, Just-In-Time Principles, Inventory Management and Theory of Constrains (TOC) philosophy. Prerequisite: IEGR 512 and EEGR 505 or consent of instructor.

IEGR 788  Seminar I  
One Hour: 1 Credit  
The Course is designed to provide a multidisciplinary approach to the integration of engineering disciplines and technologies. The primary objective is to demonstrate to the students how important it is, in the professional world, to work together as a team in terms of solving practical engineering problems. The students will be exposed to practical applications that focus on their academic interests but tempered by ideas coming from other disciplines. This will be accomplished by having guest speakers, special assignments, project-oriented discussions, and self-study activities.

IEGR 789  Seminar II  
One Hour: 1 Credit  
The course is designed to provide a multidisciplinary approach to the integration of engineering disciplines and technologies. The primary objective is to demonstrate to the students how important it is, in the professional world, to work together as a team in terms of solving practical engineering problems. The students will be exposed to practical applications that focus on their academic interests but tempered by ideas coming from other disciplines. This will be accomplished by having guest speakers, special assignments, project-oriented discussions, and self-study activities.

IEGR 790  Research in Design and Manufacturing  
Three Hours: 3 Credits  
Introduce the graduate students to the research topics in the important design and manufacturing area. Through this course, the students can conduct timely and topic engineering research, perform industrial design and analysis.

IEGR 791  Independent Study in Industrial Engineering  
Three Hours: 3 Credits  
A program of research consisting of directed reading and for laboratory work under the direction of a graduate faculty member. In accordance with an agreed upon plan and culminate in a report paper.

IEGR 792  Directed Research in Industrial Engineering  
Three Hours: 3 Credits  
A program of research consisting of directed reading and/or laboratory work on contemporary topics in industrial engineering under the direction of a graduate faculty member. In accordance with an agreed upon plan and culminate in a report paper. Limited to Doctoral Students Only.

IEGR 794  Project Report Guidance  
Three Hours: 3 Credits  
Project guidance provides students, who have not completed their project in the assigned semester, a mechanism for continuing their work under faculty supervision.
IEGR 795    Project Report I
Two Hours: 2 Credits
Project report I is to let students learn how to prepare a real project. This course emphasizes the analysis and the design of a specific industrial engineering problem under the guidance of a faculty advisor.

IEGR 796    Project Report II
Two Hours: 2 Credits
Project report II is to let students learn how to conduct a real project. This course emphasizes the analysis and the design of a specific industrial engineering problem under the guidance of a faculty advisor.

IEGR 997    Dissertation Guidance
Three Hours: 3 Credits
Dissertation guidance provides students, who have not completed their dissertation in the assigned semester, a mechanism for continuing their work under faculty supervision.

IEGR 998    Dissertation Seminar
Six Hours: 6 Credits
INSTITUTE FOR TRANSPORTATION

TRSP 513  Transportation Internship  
Three Hours: 3 Credits  
This course provides practical experience in the field of transportation and an opportunity to apply research and management tools to real world situations by placement with a transportation agency or organization.

TRSP 514  Advanced Transportation Internship  
Three Hours: 3 Credits  
This course provides practical experience in the field of transportation and opportunity to apply transportation research and management tools to real-world situations. It is designed for students selected for the MSU-MDOT Internship Program or other similar internship and co-op programs.

TRSP 601  Introduction to Urban Transportation  
Three Hours: 3 Credits  
This course is the introductory course for urban transportation systems. It will present historical, physical, economical, social, and environmental aspects of urban transportation systems. Common transportation problems in urban areas will be diagnosed, and potential solutions will be discussed in the context of policy, planning, engineering, and design.

TRSP 602  Economics of Transportation  
Three Hours: 3 Credits  
This course focuses on the microeconomic tools necessary for understanding, analyzing, and managing transportation firms and industries. The course is a mix of theoretical tools and applied industry studies. The major subjects covered in this course include costs, pricing behavior, regulation, intermodal competition, technological advances, and strategic decision making. Prerequisite: college algebra or equivalent.

TRSP 603  Quantitative Methods in Transportation  
Three Hours: 3 Credits  
This course reviews statistical analysis and probability models relevant to transportation systems analysis and modeling. Discussions include descriptive statistics, regression and correlation analysis, hypothesis testing using parametric and nonparametric statistics, probability distribution models, vehicular flow theory, and gap and queue analysis. Prerequisite: college algebra or equivalent.

TRSP 604  Operations Research Applications in Transportation  
Three Hours: 3 Credits  
This course reviews operations research techniques most relevant to physical distribution and transportation systems management. Discussions include linear programming (integer programming), transportation and transshipment problem, dynamic programming and inventory control, and graphs. Problem formulation skill is emphasized. (Prerequisite 603 or equivalent.)

TRSP 606  Urban Public Transportation Systems  
Three Hours: 3 Credits  
The basic aim of the course is to acquaint the student with the major problems and issues in the planning and management of public transportation systems. The role of the various types of public transportation systems including bus, rail, light rail and other new modes will be examined. The course covers various fields of urban public transportation including technology, planning, operation, management, and policy.

TRSP 607  Freight Transportation Systems and Logistics  
Three Hours: 3 Credits  
This course discusses the modes for freight transportation and their operations. The course provides basic concepts of supply chain management, including customer service, transportation, inventory, location, etc. The relationship between components of supply chain management is also examined.
TRSP 608  Advanced Logistics and Supply Chain Management
Three Hours: 3 Credits
This course offers in-depth analytical tools for supply chain management, including linear programming, manufacturing procedure, network analysis, inventory management, location theory, etc. The course comprises computer sessions, case studies and seminars. (Prerequisite: TRSP 607).

TRSP 609  Transportation in Developing Countries
Three Hours: 3 Credits
This course provides an opportunity for in-depth examination of transportation issues as they relate to developing countries. This course deals with problems, issues, policies, and solutions of transportation systems and the development process.

TRSP 610  Management of Transportation Systems
Three Hours: 3 Credits
This course is designed to familiarize the student with some of the tools and skills required for mid level and senior managers in the transportation industries. It will focus on managerial issues and problems.

TRSP 611  Labor Relations in Transportation
Three Hours: 3 Credits
This course will examine the relationship between the transportation industry and its organized or union employees. Special attention will be given to labor-management cooperation to enhance employee productivity and, concurrently, meet employee needs of increased wages, better working conditions, etc. The major problems and issues in collective bargaining and negotiation will also be examined.

TRSP 612  Special Problems in Transportation
Three Hours: 3 Credits
This course provides the opportunity to students to examine special topics of interest in transportation. They may include: Air & Water Transportation, Transportation Safety, Highway and Traffic Systems Design and Analysis, Transportation & Environmental Issues, Transportation Policy, Transportation & Energy Conservation, Transportation & Spatial Interaction, and other emerging transportation issues.

TRSP 613  Air Quality Planning
Three Hours: 3 Credits
This course provides the fundamental understanding of air quality concepts, analytical models, and problems encountered when complying with Federal air quality planning/analytical requirements. The main objective is to acquaint students with air quality analysis techniques used in transportation/air quality planning.

TRSP 615  Traffic and Highway Systems Design & Analysis
Three Hours: 3 Credits
This course is designed to expose the students to commonly used analytical and design techniques in transportation engineering. The course comprises two major modules: Design (including highway geometric, pavement and drainage design concepts), and Traffic operations (including traffic flow parameters, capacity analysis, safety analysis, and traffic control devices). The prerequisite for this course is Introduction to Transportation (TRSP 601) or permission of the instructor.

TRSP 616  Microcomputer Applications in Transportation
Three Hours: 3 Credits
This course is designed to provide an introduction of microcomputer applications appropriate for solving problems in transportation planning and management. The course is offered as a hands-on computer course. Students will be exposed to several state-of-the-art software packages that are commonly used by transportation professionals. The emphasis of this course is on familiarization with software, computers, and analytical techniques used by transportation professionals from a wide spectrum of fields.

TRSP 617  Intelligent Transportation Systems
Three Hours: 3 Credits
This introductory course examines the cross-cutting issues in intelligent transportation systems (ITS) deployment in the U.S. Discussions will include the overview of the evolution of ITS, the original six program category areas, the new seven service bundles and their associated user services, and intelligent transportation infrastructure and system architecture.
TRANSPORTATION - COURSE DESCRIPTIONS

TRSP 618  Advanced Urban Transportation Planning  
Three Hours: 3 Credits  
This course discusses the traditional four-step planning process and the respective mathematical models and algorithms. Hands-on experience with state-of-the-art travel demand simulation, noise, and air quality analysis software will be emphasized. Students will be given a case problem and are expected to follow MPO accepted procedures to document and present their proposed transportation plan. Prerequisite: TRSP 616 and 603, or permission of the instructor.

TRSP 619  Geographic Information Systems  
Three Hours: 3 Credits  
This course is designed to expose students to the concepts of spatial analysis using GIS tools. Students learn how to develop and use a GIS-based decision support system. In addition, students will learn how to undertake GIS need assessment studies and learn how to determine appropriate software and hardware requirements. State of the art software is used to expose students to current tools available to produce quality GIS output.

TRSP 620  Transportation Systems Evaluation  
Three Hours: 3 Credits  
This course focuses on analytical methods commonly used in transportation planning. Discussions include transit, highway, and intersection capacity analysis, the transportation planning process, traffic accident analysis, benefit-cost analysis, and environmental impact assessment process. Hands-on experience with state of the art planning and evaluation software is an important component of this course. Prerequisite: TRSP 616 and 603 or permission of the instructor.

TRSP 788  Supervised Research  
Three Hours: 3 Credits  
This course is designed to enable the student to participate in meaningful and rigorous research in transportation. Under the supervision and direction of a faculty member, students will conduct research in an area of interest. This provides an opportunity to apply quantitative methods and models to analyze specific transportation problems. Students are required to produce a major document presenting their findings.

TRSP 797  Thesis Guidance  
Three Hours: 2 Credits  
Thesis guidance provides students who have not completed their thesis in the assigned semester, a mechanism for continuing work under faculty supervision.

TRSP 799  Thesis Seminar in Transportation  
Three Hours: 3 Credits  
This course is for students conducting research and writing a thesis under faculty supervision.
DOCTOR OF PHILOSOPHY - ENGLISH

COLLEGE OF LIBERAL ARTS

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DOCTOR OF PHILOSOPHY - ENGLISH (Ph.D.)

Objective
The doctorate in the English Program prepares graduates for careers in teaching, research, and professional writing. Students will be exposed to and develop skills in quality research, critical analysis, and teaching/instructional methods. This last feature, unique to the program, is structured around a course sequence covering different aspects of university-level teaching. Graduates of the program will be expected to make significant contributions to the advancement of the knowledge of English through research and practical experience and to disseminate such knowledge through their teaching. Specifically, graduates of the program are expected to demonstrate the following:

- Ability to speak and write with perception about literature and literary theory;
- Competence in multicultural and gender studies;
- Expertise in producing selected forms of technical, creative, or scriptwriting;
- Competence in research;
- Ability to develop instructional material and to demonstrate excellence in teaching at the college Level; and
- General capacity to contribute to intellectual developments in their respective fields.

These goals will be achieved through a combination of courses in instructional techniques, research methods, and literary studies and in the production of a written dissertation.

Program Overview
The student must complete at least 57 semester hours of graduate level course work, acquire a knowledge of one foreign language, pass written and oral doctoral examinations, and produce an appropriate dissertation.

Admission
In addition to satisfying the requirements of the School of Graduate Studies, unconditional admission to the Doctor of Philosophy Degree Program in English at Morgan State University may occur in two ways:
Entry with the M.A. degree in English or in a closely related discipline from a regionally accredited institution and a GPA of 3.0 or higher in the MA degree work.

Entry with a baccalaureate degree in English or in a closely related discipline from a regionally accredited institution, with a cumulative GPA of 3.5 or above. These applicants must also demonstrate satisfactory performance on the Graduate Record Examination (GRE).
Residency and Progress Towards the Degree
The student is required to spend one academic year in full-time doctoral residency of 12 semester hours for two consecutive fall and spring semesters (totaling 24 credits). Thereafter, the graduate student is expected to be enrolled for a minimum of three hours in consecutive regular semesters (fall and spring) until completion of the program and the awarding of the degree, unless a leave of absence has been granted by the School of Graduate Studies. Failure to maintain continuous enrollment may result in dismissal from the program.

All students in the Department of English are expected to make satisfactory progress toward the degree as specified by the designated program criteria. A student who does not make such progress may be dismissed from the program. In addition, graduate assistants who fail to make satisfactory academic progress will not have their assistantships renewed.

Foreign Language Requirement
The student, by passing a proficiency examination, must demonstrate a working knowledge of a foreign language that is not his or her native language. The foreign language may include French, German, Spanish, or Latin. The student should attempt to fulfill the foreign language requirement early in the Ph.D. program, but in all cases prior to taking the Ph.D. written and oral examinations. Upon written approval by the Department, students may substitute for any of the above languages one deemed essential to their research or field of major concentration.

The student may satisfy the foreign language requirement in the following manner.

**Option I:** Passing a departmental foreign language examination.

**Option II:** Enrolling in and earning a grade of "C" or higher in two intermediate foreign language courses (203-204) in the same language at the undergraduate level. Courses taken prior to acceptance and matriculation in the graduate program may not satisfy this requirement. (Graduate financial aid may not be applied toward these courses.)

**Option III:** Completing an approved study abroad program (minimum of six weeks), which includes formal enrollment in the study of a foreign language with evaluation of performance by authorized faculty of an accredited institution.

Departmental Reading Lists and Qualifying Examinations
In order for the student to develop selfdirection in pursuing selected areas of study, the English Department will provide each student with lists of required readings, in each of the approved areas of specialization in the doctoral program. These lists, utilized in classes throughout the entire program, will be the basis for the Ph.D. qualifying examinations.

The student must pass a qualifying examination in the major and minor areas of concentration. While the examination of the major concentration must be both written and oral, that for the minor concentration may be written or oral, depending upon the preference of the student. A student is eligible to take these examinations only after completion of all of the required course work, excluding the 6 hours designated for the dissertation.

Dissertation
All students must write a doctoral dissertation (under the supervision of a research director and dissertation committee) that is an original contribution to knowledge and reveals a depth of research and critical ability. Where appropriate, the dissertation may be an advanced, creative project.

Admission to Candidacy
The student may apply for candidacy only after completing all specific course requirements, foreign language requirements, the examinations for the Ph.D. major and minor concentrations, the dissertation, and outstanding incomplete grades. A formal petition for admission to candidacy must be filed, through the English department, with the School of Graduate Studies at least one semester prior to graduation.

Grades
The student must maintain a minimum GPA of 3.0 for all graduate courses attempted at MSU. A course assigned a grade of C or lower cannot be used to fulfill degree requirements. If at any time the majority of the student’s dissertation committee determines that the student is progressing unsatisfactorily on
the dissertation, the student may be dropped from the Ph.D. program. The decision will be made only with the advice and consent of the majority of the members of the Departmental Graduate Committee.

**Time Limitations**

Students must finish the doctoral program within seven years, and they must complete the dissertation within five years after passing the written and oral examinations. If a student does not complete the dissertation within five years after passing these examinations, and prior to the seven years limitation above, the Graduate Committee will decide whether to recommend that the student be dismissed from the program for lack of satisfactory progress toward the degree or whether the student will be permitted to retake the above examinations in order to reestablish eligibility.

**Use of Master's Level Courses**

No more than 21 Masters-level credits be applied towards the Ph.D. program.

**Program of Study**

**Introductory Courses (9 Hours).**

By the end of the first year of residency, all Ph.D. students are expected to complete the following courses:

- Materials and Methods of Research in Literature and Writing (ENGL 501)
- Modern Literary Criticism (ENGL 551)
- Introduction to Linguistics (ENGL 561)

Upon written approval of the Department, students who have completed these or equivalent courses in their MA programs, may take three other courses from the English Ph.D. program in lieu of these.

**Teaching, Technology, and Research (6 Hours).**

Prior to the end of the second year of residency, the student must have completed two of the following courses (one from each subgroup), aimed at enhancing the doctoral candidate's effectiveness in college teaching and in applying technology in the teaching situation.

**Technology**

- Computer-Assisted Research and Teaching (ENGL 599)
- Digital Literacies and Hypermedia (ENGL 601)
- Literature, Technology, and the Production of Meaning (ENGL 608)

**Teaching**

- Teaching College Composition and Research (ENGL 610)
- Teaching College-Level Creative Writing/Scriptwriting (ENGL 612)
- Teaching English as a Second Language (ENGL 615)

**Field of Major Concentration (21 Hours).**

The field of major concentration will be one of three areas. However, only 6 hours of 500-level course work may be applied to the field of major concentration.

**British and American Literature and Literary Theory**

- ENGL 509 Romanticism
- ENGL 519 American Transcendentalism
- ENGL 521 Modern Drama
- ENGL 531 20th Century American Fiction
- ENGL 532 20th Century British Fiction
- ENGL 534 Chaucer
- ENGL 541 Shakespeare
- ENGL 592 Poetry Writing
ENGL 594 Fiction Writing  
ENGL 595 Supervised Reading  
ENGL 596 African American Literature  
ENGL 597 Minority Presence in American Literature  
ENGL 598 Renaissance Studies  
ENGL 701 Old English  
ENGL 703 Geoffrey Chaucer  
ENGL 705 Shakespearean Dramas in Their Socio-Political Contexts  
ENGL 707 British Humanism  
ENGL 709 Milton and Puritanism  
ENGL 715 The Victorian Novel  
ENGL 722 Native American Literature  
ENGL 723 American Folklore  
ENGL 727 The American Novel  
ENGL 729 Major African American Novelists  
ENGL 730 Major African American Poets  
ENGL 731 Twentieth Century Jewish American Literature  
ENGL 732 West Indian Literature  
ENGL 733 Chicano/a and Latino/a Literature  
ENGL 734 American Immigrant Literature  
ENGL 810 Literature and Psychology  
ENGL 815 Literature and Modernism  
ENGL 820 Thought and Influence of W.E.B. Du Bois  
ENGL 825 Twentieth Century African-American Women Writers  
ENGL 827 Colloquium I: African-American Novelists  
ENGL 828 Colloquium II: African-American Dramatists  

**Multicultural and Gender Studies**  
*Selected courses with multicultural content from the above Literature concentration may be used to fulfill Multicultural and Gender Studies concentration requirements.*  

ENGL 571 Introduction to Multicultural Literature  
ENGL 572 The Multicultural Novel  
ENGL 583 Colloquium: Literature of the African Diaspora  
ENGL 593 Multicultural Literature for Adolescents  
ENGL 740 Twentieth Century Women Authors  
ENGL 743 “Queer” Theory  
ENGL 747 Chinese Literature  
ENGL 748 Japanese Literature  
ENGL 749 Southeast Asian Literature  
ENGL 851 Critical Approaches to Multicultural Literature  
ENGL 852 Postcolonial Theories and Literature  
ENGL 853 Diasporic Literature  
ENGL 855 Womanism and Feminism  
ENGL 862 Literature of the Asian Indian Diaspora
Language and Professional Writing

The English Language
- ENGL 750 Phonetics of American English
- ENGL 751 Modern English
- ENGL 753 Studies in Advanced Grammar
- ENGL 754 Social Dialects

Technical and Expository Writing
- ENGL 564 Professional Writing Project
- ENGL 581 Advanced Expository Writing
- ENGL 755 Rhetorical Theories
- ENGL 756 Contemporary Composition Studies
- ENGL 758 The Style of Technical Writing
- ENGL 760 Problems in Technical Writing
- ENGL 875 The Business Plan and Project Report

Creative Writing
- ENGL 510 Poetry Writing I
- ENGL 511 Advanced Poetry Writing II
- ENGL 512 Short Fiction Writing
- ENGL 514 Advanced Fiction Writing II
- ENGL 515 AfricanAmerican Poetic Forms
- ENGL 516 Advanced Creative Writing Projects
- ENGL 517 The Young Creative Writer
- ENGL 518 The Literary Magazine
- ENGL 781–Models in Fiction Writing
- ENGL 782–Models in Poetry Writing

Scriptwriting and Visual Story Telling
- ENGL 513 Collaborative Television Scriptwriting
- ENGL 533 The Screenplay
- ENGL 543 Factual and Fictional Adaptation
- ENGL 553 Comedy Writing
- ENGL 555 Writing and Producing the Documentary
- ENGL 556 Film and Electronic Media for Business and Non-Profits
- ENGL 563 Advanced Dramatic Writing
- ENGL 573 Professional Internship
- ENGL 792 Film Genres
- ENGL 890 Writing and Producing the Documentary
- ENGL 893 Seminar on Television and Society
- ENGL 895 Film and Video Production

Field of Minor Concentration (9 Hours)
The field of minor concentration will be one of the above areas not selected as the field of major concentration. However, only 3 hours of 500-level course work may be applied to the field of minor concentration.

Electives (6 Hours)
Electives are chosen from remaining courses in the English program, including ENGL 801 ("Supervised Research"), ENGL 898 ("Independent Study I"), and ENGL 899 ("Independent Study II"). Upon prior approval by the Graduate Committee, students may choose elective courses from related fields. (The form requesting an elective from a related field is available from the English Department web site or the Graduate Office.)
Dissertation (6 Hours).

Two courses are designed to help the student produce an appropriate dissertation, as follows:

All students must complete the following courses:
- ENGL 996 Dissertation Development I
- ENGL 998 Dissertation Seminar

The following optional course may be taken, according to the student's interest and need:
- ENGL 999 ("Dissertation Development II").

Should the dissertation not be completed in the above courses, the student must register for ENGL 997 ("Dissertation Guidance").

Neither ENGL 997 nor ENGL 999 may be used to complete the required 57 program credits.
**MASTER OF ARTS DEGREE – ENGLISH (M.A.)**

**Objective**
This program is designed for students who contemplate pursuing graduate work beyond the bachelor’s degree, for those who are preparing for a career in secondary school teaching or in creative and script writing, and for those seeking a foundation for later Ph.D. degree work.

**Admission**
For **unconditional admission**, applicants must have earned a minimum of 30 semester hours of undergraduate courses in English above the requirement of the freshman level with a grade point average of not less than 3.0. An applicant may be admitted unconditionally upon recommendation of the department with a baccalaureate degree, 24 semester hours of undergraduate English course work, and a cumulative scholastic average of at least 3.0.

For **conditional admission**, applicants must have earned a minimum of 30 semester hours of undergraduate courses in English above the requirements at the freshman level with a grade point average of not less than 2.5 overall.

A limited number of courses from related fields may be credited toward admission upon recommendation of the English Department.

In order to be admitted into the Scriptwriting Area of Concentration, the applicants must present, as part of their undergraduate course work, 9 credits in undergraduate scriptwriting courses or their equivalent as determined by the English Department.

**General Requirements**
Candidates for the M.A. degree in English must complete a minimum of thirty (30) credit hours and pass a written comprehensive examination.

Candidates must also submit an acceptable thesis. The department reserves the right to require an oral examination. There is no formal language requirement; however, a reading knowledge of a foreign language will be required of students for whom such knowledge is considered to be a necessary tool.

**Program of Study**
The following required courses should be taken early in the program (except Thesis Seminar, which should be taken last):

- ENGL 501 Materials and Methods of Research in Literature and Writing 3
- ENGL 561 Introduction to Linguistics 3
- ENGL 581 Advanced Expository Writing 3
- ENGL 799 Thesis Seminar 3
- ENGL 797 Thesis Guidance 2

Students must elect one of the following areas of concentration:

**Literature and Language (Choose twelve (12) hours)**

- ENGL 509 Seminar in Romanticism 3
- ENGL 519 Seminar in Transcendentalism 3
- ENGL 521 Seminar in Modern Drama 3
- ENGL 531 Seminar in 20th Century American Fiction 3
- ENGL 532 Seminar in 20th Century British Fiction 3
- ENGL 534 Seminar in Chaucer 3
- ENGL 541 Seminar in Shakespeare 3
- ENGL 551 Seminar in Modern Literary Criticism 3
- ENGL 564 Professional Writing Project 3
- ENGL 571 Introduction to Multicultural Literature 3
- ENGL 572 Seminar in the Multicultural Novel 3
- ENGL 592 Seminar in Poetry 3
- ENGL 593 Multicultural Literature for Adolescents 3
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ENGL 594</td>
<td>Seminar in Fiction</td>
<td>3</td>
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<td>ENGL 595</td>
<td>Supervised Reading</td>
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<td>ENGL 596</td>
<td>Seminar in African American Literature</td>
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<td>ENGL 597</td>
<td>Seminar in the Minority Presence in Literature</td>
<td>3</td>
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<td>ENGL 598</td>
<td>Seminar in Renaissance Studies</td>
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<tr>
<td>ENGL 599</td>
<td>Computer-Assisted Research</td>
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<td><strong>Creative Writing (Choose twelve (12) hours)</strong></td>
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<td>ENGL 510</td>
<td>Poetry Writing I</td>
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<td>ENGL 511</td>
<td>Advanced Poetry Writing II</td>
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<td>ENGL 512</td>
<td>Short Fiction Writing I</td>
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<td>ENGL 516</td>
<td>Advanced Creative Writing Projects</td>
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<td><strong>Scriptwriting (Choose twelve (12) hours)</strong></td>
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<td>ENGL 513</td>
<td>Collaborative Television Scriptwriting</td>
<td>3</td>
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<tr>
<td>ENGL 523</td>
<td>Story Analysis and Script Coverage</td>
<td>3</td>
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<tr>
<td>ENGL 533</td>
<td>Seminar in the Screenplay</td>
<td>3</td>
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<tr>
<td>ENGL 543</td>
<td>Factual and Fictional Adaptation</td>
<td>3</td>
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<tr>
<td>ENGL 553</td>
<td>Seminar in Comedy Writing</td>
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<tr>
<td>ENGL 563</td>
<td>Advanced Dramatic Writing</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 573</td>
<td>Professional Internship</td>
<td>3</td>
</tr>
</tbody>
</table>

The remaining six (6) credits may be chosen from any of the above courses or concentrations.
DOCTOR OF PHILOSOPHY - HISTORY (Ph.D)

ANNETTE PALMER, PH.D.
Chairperson, History
Holmes Hall, Room 326-I
Tel: (443) 885-3190; Fax: (443) 885-8227
E-mail: apalmer@moac.morgan.edu

Objective
The Ph.D. program in history trains students for professional careers as research scholars, as college and university professors, as public historians in archives, museums and government and community organizations, and as curriculum specialists in secondary and elementary education.

Admission is based on the successful completion of the following requirements:
1. A Master’s degree with a thesis or the equivalent thereof in History, or a related field, from a regionally accredited college or university;
2. A grade point average of at least 3.3 in all previous post-baccalaureate work;
3. A formal application with an official copy of GRE scores and official transcripts submitted to the Graduate School;
4. Students for whom instruction has not been in English must submit results of the Test of English as a Foreign Language (TOEFL);
5. Three academic letters of recommendation;
6. A writing sample (a graduate seminar or research paper) in History;
7. A statement of goals, the proposed major concentration and two minor concentrations of study; and
8. A successful interview with the History Department Doctoral Committee.

General Requirements Upon Enrolling
Students entering the program with GRE verbal scores below 400 are required to enroll in and pass with a grade of “B” or better - Advanced Expository Writing - ENGL 581 (no credits toward the degree).

Select one major concentration (field):

- African American History
- African Diaspora History
- Twentieth Century United States History

The remaining two fields will serve as minor concentrations.

History credits earned previously in post baccalaureate study will be evaluated upon matriculation. Students who have not completed prerequisite credits required for admission in previous post baccalaureate study will be required upon entering to take up to 6 credits of prerequisite courses at the 500 to 700 levels.

Students must also demonstrate professional competency in two of the following skills/methods related to their research:

- Foreign language; (or equivalency taken on MA level and recorded on MA degree transcript ) ; or
- Second foreign language; or
- Oral history practicum, or
- Archival history practicum
Competency in foreign language may be met by a proficiency examination administered by the Department of Foreign Languages or by enrollment in an undergraduate foreign language class (no language credits toward the degree).

The oral history requirement may be met by taking the prerequisite theory course - HIST 708 -Oral History (credits for which may be applied toward the degree as a course in 20th century U.S. History, or as an elective) and then HIST 808 -Oral History Practicum (no credits applied towards the degree).

The archival history requirement may be met by taking the prerequisite theory course - HIST 707- Principles of Archival Theory (credits for which may be applied toward the degree as an elective) and then HIST 807 –Archival Practicum (no credits applied toward the degree).

Students must maintain a 3.5 GPA in all of their course work at the end of each academic semester. Students are required to pass written comprehensive examinations in the major concentration and in the two minor concentrations. Each examination may be repeated only once. (See department graduate handbook for comprehensive examination preparation.)

Students must take three credits of Dissertation Proposal -- HIST 901, after which they must register for the six-credit Dissertation Seminar -- HIST 998. Thereafter, until the dissertation is completed, students must be in residence by registering each semester for three hours of Dissertation Guidance -- HIST 997. The dissertation must involve significant, original historical research, using primary resources and representing a contribution to historical knowledge. Candidates must be enrolled at the time of the oral defense. (See graduate school Dissertation and Thesis Handbook for guidelines on writing the dissertation.)

Students are required to complete the degree within seven years from entering the program.

PROGRAM OF STUDY
GENERAL REQUIREMENTS

I. Writing Proficiency
   A. GRE Verbal Score above 400 or
   B. ENGL 581-Advanced Expository Writing

II. Prerequisite History Courses (500+)
   HIST 804-Advanced Historiography 3

IV. Content and/or Theory Courses (600+)
   A. Major Concentration 12
      B. Minor Concentration 1 6
      C. Minor Concentration 2 6
      D. History Elective 3

V. Professional Competency-Two Areas:
   A. Foreign Language I or
   B. Foreign Language II or
   C. HIST 808-Oral History Practicum or
      (Prerequisite: HIST 708 Oral History)*or
   D. HIST 807-Archival History Practicum
      (Prerequisite: HIST 707 Archival History)*

VI. Dissertation Courses
   A. HIST 901 – Dissertation Proposal 3
   B. HIST 998 – Dissertation Seminar 6
   C. HIST 997 – Dissertation Guidance (each semester until dissertation has been submitted) 3

Total Degree Credits Required 42

Note: Credit for prerequisite courses, professional competencies and writing competencies are not counted as credit towards the degree.
MASTER OF ARTS - HISTORY (M.A.)

Objective
The Masters of Arts in History is designed for students who plan to teach in middle schools, high schools, or community colleges; for students who plan careers in public service, public policy and foreign affairs, public history; and for students who contemplate pursuing further scholarly activities. It is a useful adjunct for persons with careers in theology and law; in library science; in journalism and news management; and in government, business and industry, and administration.

Admission
For unconditional admission, applicants must have: (1) a minimum of 24 semester hours of undergraduate history courses; and (2) earned not less than 3.0 in history courses and overall GPA.

For conditional admission, applicants must have earned not less than an undergraduate scholastic average of 2.5 in history and overall GPA.

General Requirements
Candidates for the M.A. degree in History must complete a minimum of thirty (30) credit hours, twenty-four (24) of which should be in History, pass a written comprehensive examination and submit an acceptably written thesis.

Other Requirements
HIST 598 Historiography & Historical Methods 3 hours
A Supervised Research, or a Seminar course in History 3 hours
HIST 799 Thesis Seminar hours 3 hours

The remaining 21 credits may be taken by following the student's approved program or study. Up to 6 hours in electives may be taken in other disciplines with the advisor's approval.

Total 30 credit hours
DOCTOR OF PHILOSOPHY - PSYCHOMETRICS (Ph.D)

PAMELA E. SCOTT-JOHNSON, PH.D.
Chairperson, Psychology
Jenkins Bldg, Room 408
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E-mail: psjohnson@moac.morgan.edu or pscottjo@jewel.morgan.edu

Objective
The main objective of the Ph.D. program in Psychometrics is to develop scholars who possess sophisticated statistical and analytical capabilities and acquire the quantitative and methodological skills (e.g., measurement theory, statistical analysis, research design, evaluation, and qualitative tools) needed to construct valid measurements and assessments of what and how individuals learn. A secondary objective for the program is to develop a new cadre of researchers and practitioners, who have the analytical skills and cultural competence to effectively yield innovative interventions that address issues within the field (discipline) itself as well as inform policies that influence minority or special populations (e.g., African Americans) and those within urban environments. Scientific research serves as the primary vehicle to advance theories explaining how people learn, teach, and differ from one another. Students will be prepared to conduct and apply research concerned with the discovery and validation of psychological processes and principles with the potential to optimize human development and learning, and to improve the methodological techniques that are employed in this process.

Students in Psychometrics will be instructed in a coherent and coordinated program of statistics, psychological testing, educational assessment, program evaluation and other applied research techniques. Students in the program will be equipped to be culturally competent vis-à-vis the needs of those within the urban environment. The program will afford students the opportunity to demonstrate competencies in the quantitative, research-oriented commonalities relevant to disciplines within the behavioral and social sciences and education as well as their applications in teaching and instruction, industry and business, and health.

Admission Criteria
Admission is based on the successful completion of the following requirements:
- A Master’s degree with a thesis or the equivalent thereof in Psychology, Mathematics, Education, or a related field, from a regionally accredited college or university; or,
- A cumulative grade point average of at least 3.5 in all previous baccalaureate work;
- A formal application with an official copy of GRE scores and official transcripts submitted to the Graduate School;
- Students for whom instruction has not been in English must submit results of the Test of English as a Foreign Language (TOEFL);
- Three academic letters of recommendation;
- A writing sample or original research paper from your master’s program (or, if applying with a baccalaureate degree, a writing sample or original research paper from your major);
- A three-page typed exposition regarding the candidate’s personal academic and professional plans and the reasons for selecting Morgan State University;
- A successful interview with the Psychology Department Doctoral Committee.

General Requirements Upon Enrolling
Students entering the program with deficient GRE quantitative scores and verbal scores are required to enroll in and pass with a grade of “B” or better foundational graduate course in statistics or mathematics and expository writing courses. No credits will be granted toward the degree.

Students who have not completed prerequisite credits necessary to succeed in some Psychometrics methodology and/or statistics courses may be required, upon entering, to take undergraduate and/or master’s level courses before enrolling in Ph.D. level courses.

Students must also demonstrate professional competency in all of the following skills/methods related to their research:
• Foreign language; (but not one’s native tongue); or
• Literacy in computer languages and programming; and,
• Statistical Package for the Social Sciences (SPSS) or other related and relevant statistical research software; and,
• Research or institutional practicum in tests or measurements.

The student may satisfy the foreign language requirement in the following manner.

**Option IFL:** Passing a departmental foreign language examination.

**Option IIIFL:** Enrolling in and earning a grade of "C" or higher in two intermediate foreign language courses (203-204) in the same language at the undergraduate level. Courses taken prior to acceptance and matriculation in the graduate program may not satisfy this requirement. (Graduate financial aid may not be applied toward these courses.)

**Option IIIIFL:** Completing an approved study abroad program (minimum of six weeks), which includes formal enrollment in the study of a foreign language with evaluation of performance by authorized faculty of an accredited institution.

Students may satisfy literacy in computer language and programming requirement in the following manner:

**Option ICL:** Passing a departmentally designed literacy and programming examination.

**Option IIICL:** Enrolling in and earning a grade of "C" or higher in two intermediate computer science courses in the same language at the undergraduate level. Courses taken prior to acceptance and matriculation in the graduate program may not satisfy this requirement. (Graduate financial aid may not be applied toward these courses.)

**Option IIIICL:** Completing an approved internship (minimum of six weeks), which includes formal enrollment in the study of a computer literacy and programming with evaluation of performance by authorized faculty of an accredited institution.

Students must maintain a 3.0 GPA in all of their course work at the end of each academic semester. Students are required to pass a written comprehensive examination. The comprehensive examination may be repeated only once.

Upon completion of required course work and the comprehensive examination, students must register for the six-credit Dissertation Seminar – PSYC 998. Thereafter, until the dissertation is completed, students must be in residence by registering each semester for three hours of Dissertation Guidance – PSYC 997. The dissertation must involve significant, original research, using primary resources and representing a contribution to the field of Psychometrics. Candidates must be enrolled at the time of the oral defense. (See graduate school Dissertation and Thesis Handbook for guidelines on writing the dissertation.)

Students are required to complete the degree within seven years from entering the program.

**PROGRAM OF STUDY**

**GENERAL REQUIREMENTS**

Program Areas / Emphases

a. **Psychometrics** focuses on research methodology with an emphasis in educational and psychological analysis and measurement as it relates to test design, instrument construction, scale analysis, and measurement theory. Persons working in this area typically have strong interests in supporting areas of statistics and research design, computer applications, and/or mathematics. Within the psychometric area, students can pursue one of 2 concentrations:
   i. Applied Statistics
   ii. Measurement and Assessment (Test Construction and Development)

b. Ph.D. (63 credit hours)
   i. Complete requirements for M.S. (30 credit hours)
   ii. 9 additional credits in Statistics
   iii. 9 additional credits in Measurement and Assessment (Test Construction/Development)
   iv. 6 credit hours in Electives
   v. 3-6 credit hours for Internship (length may vary from 6 – 12 months)
   vi. 6 credit hours for Dissertation Research

Note: Credit for prerequisite courses, professional competencies and writing competencies are not counted as credit towards the degree.
MASTERS OF SCIENCE – PSYCHOMETRICS

MASTERS OF SCIENCE – PSYCHOMETRICS (M.S.)

Objective
The Masters of Science in Psychometrics is designed to provide training for individuals within the educational, psychological, and mathematics communities (e.g. teachers, administrators, staff members, and policy makers) to assist them in effectively addressing issues related to the implementation of testing, assessment, and evaluations. One of the cornerstones of the program will be training and preparing students in statistics and data analyses. Psychological themes involving learning, cognitive development, development in general, resilience and student achievement gaps, literacy, school violence and prevention, and influence (psychological and mental health) on learning are also considered.

Admission
To be eligible for admission to the masters program in psychometrics, an applicant must:
• Have earned a bachelor’s degree from a regionally accredited college or university, preferably in psychology, mathematics, test and measurements, or any related area.
• Possess an undergraduate cumulative grade point average (G.P.A.) of 3.0 or better to be considered for unconditional admission. Students who possess a cumulative undergraduate G.P.A. of between a 2.7 and 2.9 may be considered for conditional admission. Post-bachelor’s undergraduate credits will not be used to enhance G.P.A. requirements for admission to graduate study.
• Satisfactorily completed certain minimum coursework in general or educational psychology, statistics, research design and methodology, areas depending on the discipline/program to which the student seeks admission. The specific courses and amount of work depends upon the field of study that the student proposes to enter.
• Submit an application for admission together with official copies of transcripts from all graduate and undergraduate institutions attended.
• Provide test scores from the Graduate Record Examination (GRE). Test scores may not be more than 5 years old prior to the date of application.
• Submit three letters of recommendation sent to the Dean of the School of Graduate Studies from officials or faculty members of institutions previously attended who are acquainted with the applicant’s ability for graduate study or from employment supervisors where applicable.
• Submit a three-page typed exposition regarding the candidate personal academic and professional plans and the reasons for selecting Morgan State University.

General Requirements
Candidates for the M.S. degree in Psychometrics must complete a minimum of thirty (30) credit hours and submit an acceptably written thesis.

Program Requirements
M. S. (30 credit hours)
  i  6 credit hours from the Foundational or Core Course
  ii  6 credit hours from Measurement and Assessment (Test Construction/Development)
  iii  9 credit hours from Statistics
  iv  6 credit hours in Electives
  v  3 credit hours Thesis (Empirical Research Project)
MASTER OF ARTS - AFRICAN AMERICAN STUDIES (M.A.)
WITH A CONCENTRATION IN AFRICAN DIASPORA HISTORY

Objective
The Master of Arts Degree in African American Studies has a concentration in African Diaspora history. It is a cooperative program which includes other College of Liberal Arts departments. The degree is designed for students who plan careers in teaching secondary school and community college, and in government, foreign affairs, public history, journalism, and museum or information services, and for students who contemplate pursuing further scholarly activities.

Admission
For unconditional admission, applicants must have: (1) a minimum of 18 semester hours of undergraduate history or related courses in the area of History or African Diaspora studies; and (2) not less than 3.0 in history, related fields, plus the overall GPA.

For conditional admission, applicants must: (1) have earned a minimum of 18 semester hours of undergraduate history or related courses, or must successfully take HIST 350 and other supporting undergraduate courses as needed; (2) have earned not less than a 2.5 average in History, related fields plus the overall GPA.

General Requirements
Candidates for the degree must complete a minimum of thirty (30) credit hours, pass a written comprehensive examination and submit an acceptably written thesis.

Other Requirements
HIST 598 Historiography & Historical Methods..............................................................3 hours
Four common courses in African American, African, or African Diaspora or related topics offered at MSU (at least two from the History Department and two from MSU supporting Departments-See Graduate Coordinators For options)................................................... 12 hours
History Electives........................................................................................................ 9 hours
A Supervised Research or Seminar course in History.............................................. 3 hours
HIST 799 Thesis Seminar..................................................................................... 3 hours
Total.................................................................................................................. 30 hours

History electives and electives from other departments must be approved by your advisor.
MASTER OF ARTS - ECONOMICS

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Chairperson, Economics
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Randal Reed, Ph.D.
Graduate Program Coordinator, Economics
Holmes Hall, Room 311
Tel: (443) 885-1880; Fax (443) 8223

Objective
The Master of Arts degree program in Economics is designed to enable students to develop competency in the areas of economic analysis and research, to prepare them for a wide variety of positions as economists and other related occupations in the public and private sectors including education, and to provide the academic and research training necessary for study beyond the Master’s level.

Admission
In addition to meeting admission requirements of the School of Graduate Studies, applicants for the master’s degree in Economics must take the Graduate Record Examination (GRE).

General Requirements
Following their admission to the program, all students will prepare a program of study with the graduate program coordinator and submit a copy to the Dean of the School of Graduate Studies. Changes will be made only with departmental and Graduate School approval.

All candidates for the degree must complete a minimum of 30 semester credit hours and pass a written departmental comprehensive examination. In addition, students must submit an approved thesis and pass an oral examination.

Program of Study

Core Program (Required of all students) Credits
ECON 515 Probability and Statistics I* 3
ECON 520 Micro Economic Theory 3
ECON 521 Macro Economic Theory 3
ECON 522 Econometrics 3
ECON 799 Thesis Seminar 3

(* May be waived for students demonstrating competency in the field.)

Electives (Minimum of 12 credit hours required)
ECON 512 Business Cycles & Forecasting 3
ECON 514 Economic Development 3
ECON 516 Probability and Statistics II 3
ECON 523 Development of Economic Thought 3
ECON 551 Industrial Organization 3
ECON 555 Economics of Transportation 3
ECON 541 International Trade Theory 3
ECON 622 Advanced Econometrics 3
MASTER OF ARTS - INTERNATIONAL STUDIES (M.A.)

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Program Description
The Master of Arts (M.A.) degree in International Studies is an interdisciplinary program designed to provide a broad and solid
foundation for analytical thinking and problem solving skills regarding international issues, global governance, and cultural and
policy analysis. This interdisciplinary program prepares students for the challenges and opportunities of a global world by providing
them with the appropriate knowledge, tools, and skills to understand, function, and work effectively and collaboratively in an in-
creasingly interdependent and multinational world. The M.A. in International Studies is recognized both within and outside of the
academy as an appropriate advanced degree for those pursuing further academic study or planning careers in many of the in-
ternational aspects of contemporary society including culture analysis, politics, health and nutrition, business, art, architecture,
engineering, communications, and environmental studies.

Admission
In addition to meeting the criteria for admission to the School of Graduate Studies, for unconditional admission, applicants must
present evidence of (1) obtaining a minimum of fifteen (15) credit hours of course work with an international content, and (2) having
earned an undergraduate academic average of 3.0 in the major area of study.

Applicants who possess a cumulative grade point average of 2.5 to 2.99 may be considered for conditional admission.

All students applying for admission must provide test scores for the Graduate Record Examination (GRE). Test scores may not
be more than 5 years old prior to the date of application.

Foreign Language Requirement
The student must demonstrate a working knowledge of a foreign language that is not his or her native language. The foreign
languages may include Arabic, French, German, Russian, or Spanish. Upon written approval by the Department, students may
substitute for any of the above languages one deemed essential to their research or field of major concentration. Students who
do not successfully pass the foreign language examination may be allowed to retake the exam when scheduled by the Department
of Foreign Language.

The student may satisfy the foreign language requirement in the following manner.

Option I:  Passing a departmental foreign language examination.

Option II: Enrolling in and earning a grade of "C" or higher in two intermediate foreign language courses (203-204) in the same
language at the undergraduate level. Courses taken prior to acceptance and matriculation in the graduate program may not satisfy
this requirement. (Graduate financial aid may not be applied toward these courses.)

Option III: Completing an approved study abroad program (minimum of six weeks), which includes formal enrollment in the
study of a foreign language with evaluation of performance by authorized faculty of an accredited institution.
General Requirements
Students are required to complete thirty-three (33) credit hours of course work, successfully pass a comprehensive examination, and as an exit requirement either write and successfully defend a thesis, or participate in a study abroad program, be engaged in an internship, or complete an additional six credits. All exit options include a substantial writing project. Thesis guidance credits (i.e., INST 797) shall not be included as part of the 33 credits needed to satisfy degree requirements. The distribution of the 33 credits is listed below:

<table>
<thead>
<tr>
<th>Component</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Courses</td>
<td>15</td>
</tr>
<tr>
<td>Program Concentration</td>
<td>12</td>
</tr>
<tr>
<td>Electives</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total Requirements</strong></td>
<td><strong>33</strong></td>
</tr>
</tbody>
</table>

Students are required to successfully complete degree requirements according to the following procedures:

**Level One:**
Successful completion of graduate course work

**Level Two:**
Successful completion of the Department Graduate Comprehensive Examination.
The comprehensive examinations are intended to test students’ familiarity with, and critical understanding of, the broad range of ideas and literature that the disciplinary fields comprise. Students prepare for examinations by taking different combinations of courses according to the specific field guidelines presented below and in consultation with faculty advisors.

Graduate students, who do not successfully pass all areas of the graduate comprehensive examination, are required to retake, by the following semester, only those areas failed. Students who do not retake the exam the following semester are subject to taking the entire examination.

Students are required to select a thesis committee consisting of the director and two readers. However, one reader can be an external committee member from another department. All committee members must be full-time faculty.

**Level Three – Exit Options**
Write and successfully defend a thesis; or, 
Attend an internship in an approved agency and write a public policy paper; or, 
Complete six additional credits and write a substantial research paper; or, 
Participate in a study abroad for a minimum of 15 weeks and write a research paper.

*Students completing a thesis will be awarded a Master of Arts (M.A.) degree. Thesis guidance (INST 797) is not included in graduation requirements. Students exercising any of the other exit options will be awarded the Master of Science (M.S.) degree.

Program of Study
Because of the interdisciplinary focus of the International Studies programs, many of the courses in which students enroll, particularly in their area(s) of concentration, will depend on the students’ areas of interest and the schedule of courses in the department or school offering the courses. In general students admitted to the International Studies program can expect to enroll in the following:

**Core Requirements**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>POSC 501</td>
<td>Theories of International Relations</td>
<td>15</td>
</tr>
<tr>
<td>ENGL 564</td>
<td>Technical Writing</td>
<td></td>
</tr>
<tr>
<td>INST 603</td>
<td>Research Method</td>
<td></td>
</tr>
<tr>
<td>SOCI 531</td>
<td>Seminar in Social Deprivation</td>
<td></td>
</tr>
<tr>
<td>HIST 580</td>
<td>Historical Origins of Contemporary Problems</td>
<td></td>
</tr>
</tbody>
</table>

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</tr>
<tr>
<td><strong>Total Requirements</strong></td>
<td><strong>33</strong></td>
</tr>
</tbody>
</table>
Concentrations  
Depending on their areas of interest and the schedule of courses, students may elect to concentrate on topics in:

- International Public Health and the Environment
- International Business and Economics
- International Social and Historical Thought
- International Language and Culture
- International Politics and Foreign Policy
- International Engineering and Technology

Depending on their areas of interest and the schedule of courses, students may elect to focus on global or regional geographic areas in:

- Africa
- Asia
- Europe
- Latin America
- The Middle East
- The Caribbean
- North America

Students are required to select at least one course from two of the above areas of concentration. Students are encouraged to meet with their academic advisor in the International Studies program to discuss the selection of courses in their area of Concentration.

Electives  
Consistent with the interdisciplinary focus of the International Studies program, students are encouraged to select courses from across the curricula of graduate programs in order to enhance their breadth and depth of understanding of issues in their concentration and in international studies. For example, students may elect to satisfy their six credits of electives in a Fulbright or other study abroad program.
MASTER OF ARTS - MUSIC (M.A.)

Eric Conway, D.M.A.
Chairperson, Fine Arts
Murphy Fine Arts Center, Room 329-C
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Objective
This program is designed to enable students to develop the expertise to make independent and original contributions to the profession. It will also assist students who plan careers in teaching and arts councils and foundation work, and provide the necessary academic foundation for those seeking to pursue the D.M.A. or Ph.D. degrees.

Admission
For unconditional admission, applicants must have earned a minimum undergraduate academic average of 3.0 in their major area of study and must present a minimum of 49 semester hours in undergraduate music courses and hold a bachelor’s degree in some area of music. All applicants must complete a formal audition before the graduate music faculty on campus to show that the student has the requisite skills to be successful in the Masters Degree Program. Additionally, during their visit to the University, students will be given two formal examinations to demonstrate their general knowledge in music history and music theory. All applicants must be interviewed by the Graduate Program Coordinator and meet the entrance requirements specified in the Handbook for Graduate Music Students, available at the Office of the Graduate Coordinator.

General Requirements
At the beginning of their studies, all students will prepare a program of study in consultation with the Graduate Coordinator and submit a copy to the Dean of the School of Graduate Studies. All students are required to complete the Common Core Curriculum of 20 credit hours. Changes will be made only with departmental and Graduate School approval.

All students must pass the departmental comprehensive examination prior to graduation. The degree program requires a minimum of 33 credit hours.

Common Core Curriculum
MUSC 527/528 Ensemble 2
MUSC 512 Advanced Choral Literature 3
MUSC 516 Symphonic Literature 3
MUSC 524 The History of Black Music 3
MUSC 536 Form and Analysis 3
MUSC 595 Research in Music 3
MUSC 799 Thesis Seminar, or 3
MUSC 795 Recital Seminar 3

Electives
Students will be advised in their selection of electives in accordance with their individual program of study. Applied, Ensemble, Music History, Music Theory and other already approved courses are available.

Electives

Total

33
Sample Program of Study

MUSA XXX* Private Lessons (maximum of 9 credits) 9
MUSC XXX* Ensemble (maximum of 4 credits) 4
MUSO 512  Advanced Choral Literature 3
MUSC 526  Symphonic Literature 3
MUSC 524  The History of Black Music 3
MUSC 536  Form and Analysis 3
MUSC 598  Research in Music 3
MUSC 799  Thesis Seminar 3
Electives 2

Total 33
Objective
The Masters of Arts/Science degree program in Sociology is designed to provide options for persons seeking competencies in Sociology, which can be readily applied to their work situations, as well as for persons wishing to follow an academic track, which offers rigorous training in research as preparation for teaching and/or the pursuit of doctoral studies.

Admission
For unconditional admission, in addition to earning a minimum cumulative undergraduate academic average of 3.0, applicants must also have earned 3 credits in statistics and 9 credits in sociology and a minimum 3.0 G.P.A. in the major.

For conditional admission, in addition to earning a minimum cumulative undergraduate academic average of 2.5, preference is shown for applicants who have earned at least 3 credits in sociological theory, 3 credits in social research methods, 3 credits in statistics, and 6 other credits in sociology and a 2.5 G.P.A. in the major area. Students admitted conditionally must successfully complete the core courses, excluding Thesis Seminar, within the first 18 hours of study.

General Requirements
- Candidates for the M.A. degree must earn a minimum of 31-credit hours and submit an approved thesis.
- Candidates for the M.S. degree must earn a minimum of 34-credit hours and pass a written comprehensive examination.

(Note: The written comprehensive examination cannot be taken until the following core courses have been completed: SOCI 510, SOCI 511, SOCI 520, and SOCI 521.)

Program of Study

Master of Arts
A. Core Program (Required of all students)
   - SOCI 500 Proseminar in Sociology: 1 credit
   - SOCI 510 Social Statistics: 3 credits
   - SOCI 511 Classical Sociological Theory: 3 credits
   - SOCI 520 Techniques of Social Research: 3 credits
   - SOCI 521 Contemporary Sociological Theory: 3 credits

B. Electives in Sociology (15 hours required)
   Course work outside of the Department may only be taken with Departmental approval and must support the program so as to constitute a unified program of study.

Master of Science
A. Core Program (Required of all students)
   - SOCI 500 Proseminar in Sociology: 1 credit
   - SOCI 510 Social Statistics: 3 credits
   - SOCI 511 Classical Sociology Theory: 3 credits
   - SOCI 520 Techniques of Social Research: 3 credits
   - SOCI 521 Contemporary Sociological Theory: 3 credits
   - SOCI 570 Seminar in Applied Sociology: 3 credits

B. Electives (18 hours required)
   Course work outside of the Department may only be taken with departmental approval and must support the program so as to constitute a verified program of study.
MASTER OF SCIENCE–TELECOMMUNICATIONS MANAGEMENT (M.S.)

Baruti Kapano, Ph.D.
Chairperson
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Tel: (443) 885-3330; Fax (443) 885-8322
bkopano@moac.morgan.edu

Objective
The Master of Science in Telecommunications Management is designed to serve the university, the student, business and professional communities, and the minority community. It is specifically designed to under gird Morgan’s mission and serve the minority community by providing an advanced educational program that immediately and directly addresses the under representation of blacks and other minorities in the telecommunications management sector of the professional labor force within the city, state, and the nation. It is designed to serve the student and business/professional communities through the development of specific partnerships with media and telecommunications businesses and organizations.

Given Morgan’s urban mission, the program emphasizes the role of telecommunications policies in the urban setting. Candidates are expected to understand broadcast, cable, and other electronic media regulations and management, as well as the unique problems of developing programming for these conduits. Given the expected emphasis on local, state, and federal rule making in telecommunications, it is important that future industry managers and producers have a sound grounding in both community and civic affairs.

The program emphasizes the development of critical thinking in the decision-making process, based on the thoughtful and informed consideration of the possibilities, limitations, and responsibilities of the electronic media. The program explores telecommunications theories, policies, and practices, and prepares students for a leadership role in the field through the study of telecommunications industries and their structures legal and regulatory constraints, technological systems, societal expectations, and related effects on audiences and institutions.

Finally, the six-credit internship will play a major role in the education and marketability of the candidate, just as it does in the undergraduate Telecommunications program.

The Program
The Morgan State University Master of Science in Telecommunications is an advanced program of study designed for Telecommunications professionals, individuals with an interest in media management, and others whose interests or talents bring them into direct contact with the corporate and professional world of Telecommunications.

Telecommunications is the process of communicating electronically, through radio, broadcast and cable television, interactive video, multimedia, telephony, electronic mail, video and audio teleconferencing, and through other technologies used to create, store, and transmit messages to one another. Telecommunications is the study of the use of these technologies by individuals and organizations.

Telecommunications technologies now pervade all contexts of communication. Traditionally, these technologies were used for interpersonal communication (e.g., by telephone) and for entertainment (by TV and radio), but are now widely used by business, government and education. All of these technologies are subject to regulation by a variety of federal, state, and local rule making authorities; therefore regulatory knowledge is essential if one is to consider to effective use and development of these technologies. The degree program requires study in telecommunications law, management, structure, and production.

The program curriculum consists of thirty-six (36) semester hours, and allows the student to concentrate in one of three areas (in Systems, Management, or Production). Courses are scheduled to permit completion of degree requirements in one-, two- or three-year time frames. Students may attend either full- or part-time, but all requirements for the Masters degree must be completed within a seven-year period.

Admission
MASTER OF SCIENCE–TELECOMMUNICATIONS MANAGEMENT

Admission to the program is open to individuals holding a bachelor’s degree in any communications-related discipline or to those who have taken a bachelor’s in an unrelated field, but are currently pursuing telecommunications careers. In addition to meeting admission requirements of the School of Graduate Studies, applicants must also have earned a minimum undergraduate academic grade point average of 3.0 in their major area of study, demonstrate satisfactory performance on a national entrance examination, such as the Graduate Record Examination (GRE) and should have taken those examinations no more than three years prior to applying. For conditional admission applicants must have earned a minimum undergraduate average of 2.7. The Test of English as a Foreign Language (TOEFL) is required of all international students whose native language is not English.

Other admissions criteria include the following:
- Recommendations from practicing telecommunications professionals, or other professionals and/or academicians;
- Career objectives as outlined in an entrance essay to be completed by the applicant;
- Previous academic achievement, professional accomplishments, and earned degrees; and,
- Results obtained on a national entrance examination such as the Graduate Record Examination (GRE).

General Requirements
Students must successfully complete all course work, complete at least one professional internship (where they will be supervised and evaluated by a site supervisor), and demonstrate that they are ready to handle the responsibilities of management within some sector of a telecommunications-related industry.

All candidates are expected to (re)enter a professional position in telecommunications upon graduation. The intern program will be coordinated with specific area telecommunications businesses and organizations in order to create a pool of qualified entry-level (or better) management-level candidates.

In order to achieve these expectations, students are expected to:
- develop an overall understanding of size, structure, and complexity of the overall telecommunications industry, and a specific understanding of the broadcast, cable and other interrelated electronic media industries (based on completion of core courses.
- develop an understanding of the unique problems and opportunities of developing and producing
- acquire an appreciation for the intricacies of local, state, and federal rule making in telecommunications, and an awareness of the skills needed for communicating with various rule making publics, including industry managers and those active in community and civic affairs—(based on completion of core and specialty courses.)
- develop a knowledge base that will facilitate critical thinking and decision-making in either telecommunications management generally, or in the management generally, or in the management of systems/media or production media (based on completion of specialty courses and the capstone seminar.
- demonstrate specific position-related management skills (based on completion of the internship and entrance or re-entry into some telecommunications industry.

It is also expected that graduates will become actively involved in the professional telecommunications community through involvement in professional associations and organizations, especially those associated with minorities in the industry. (This will be introduced and encouraged in the capstone seminar.

Required Courses
All students must complete 12 hours of core courses, 15 hours of sequence courses, six-credits of internship experience, and a final Seminar in Telecommunications.

I. Required Foundation (Core) Courses - 12 credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>TELC 500</td>
<td>Urban Telecommunications Networks</td>
<td>3</td>
</tr>
<tr>
<td>TELC 510</td>
<td>Telecommunications Structure and Regulation</td>
<td>3</td>
</tr>
<tr>
<td>TELC 512</td>
<td>Communication Theories Previously numbered TELC 534</td>
<td>3</td>
</tr>
<tr>
<td>TELC 570</td>
<td>Telecommunications Research Methods</td>
<td>3</td>
</tr>
</tbody>
</table>

Specialization (Sequence) Courses - 15 credits
An individual must choose three courses from one Specialization Area along with one course each from the other two areas. The three Specialization Areas include: (A) Systems, (B) Management, and (C) Production.

### A. Systems
- TELC 520 telecommunication Communications Technologies 3
- TELC 531 Cable/Broadband Communications 3
- TELC 532 Telecommunications Services 3
- TELC 533 Data Processing and Communications 3
- TELC 535 Data Communications Systems 3

### Management
- TELC 540 Organizational Communication 3
- TELC 541 Strategic Planning and Control 3
- TELC 542 Financial Management 3
- TELC 543 Regulated Industries 3
- TELC 544 Media and Social Services 3

### Production
- TELC 550 Audio Studio Production Management 3
- TELC 551 Video Studio Production Management 3
- TELC 552 Program Analysis 3
- TELC 553 Non-Broadcast Systems 3
- TELC 554 Community Cable operations 3
- TELC 555 Production Workshop 3

### II. Internship Seminar—6 Credits
All students must complete six internship credits in their area, either at one time, or through two separate internships.
- TELC 600 Telecommunications Internship

### III. Project Seminar -3 Credits
All students must complete a final project or paper as part of the capstone Seminar in Telecommunications. This three credit course will typically be taken in the student’s last semester.
- TELC 650 Seminar in Telecommunications

**Total 36**
COURSE DESCRIPTIONS

DEPARTMENT OF ECONOMICS

ECON 501 Survey of Macro And Micro Economics
Three Hours: 3 Credits
This course covers topics in macro, micro, international and development economics with emphasis on public economic policy.

ECON 507 Economics of Education
Three Hours: 3 Credits
This course is a survey of the field of economics of education with an emphasis on the urban environment. Models of investment returns in education. Resources allocation environment and its subdivisions. Educational financing.

ECON 512 Business Cycles and Forecasting
Three Hours: 3 Credits
This course covers the causes of cyclical fluctuations in general business activity as well as techniques for forecasting these fluctuations. Topics covered include theories of and patterns in cyclical business/economic fluctuations, monetary and fiscal policy stabilization tools.

ECON 513 Statistical Analysis
Three Hours: 3 Credits
This course will cover data collection, averages, probability distribution, hypothesis testing, statistical quality control decision theory, time series and correlation analysis.

ECON 514 Economic Development
Three Hours: 3 Credits
This course covers theories of economic development of developing countries. Planning and institutional practices of selected countries. Optional solutions to problems such as dualism, investment, development assistance, fiscal, monetary trade, and population policy.

ECON 515 Probability & Statistics for Business: Decisions I & II
Three Hours: 3 Credits
This course deals with the presentation and interpretation of statistical data; descriptive statistics; principles, methods, techniques and procedures governing the conduct of scientific surveys; and the use, of statistical measures to improve decision-making. Probability theory, statistical inference, statistical decision theory, and elements of econometrics are included. The course covers various statistical tests: Chi-Square analysis, analysis of variance, time series analysis, regression analysis, correlation analysis, and forecasting.

ECON 520 Micro-Economic Theory
Three Hours: 3 Credits
Topics include: theory of consumer choice; the theory of production; income distribution and welfare theory; alternative market structure; and partial and general equilibrium theory.

ECON 521 Macro-Economic Theory
Three Hours: 3 Credits
This course covers aggregative theory of income, employment, interest, and the price level; consumption, savings and investment; macro dynamic growth theory; and fiscal and monetary policy.

ECON 522 Econometrics
Three Hours: 3 Credits
This course covers the application of mathematical and statistical methods to economic theory. Topics covered include: Regression and Correlation Analysis; Estimation and Hypothesis Testing in Regression Models; and Simultaneous Equations Models and Methods. Emphasis is placed on statistical and econometric theory, careful application of econometric methods to economic issues, and the critical evaluation of empirical studies.
ECON 523  Development of Economic Thought  
Three Hours: 3 Credits  
This course is a survey of economic thought from Adam Smith to J.M. Keynes and modern thinkers: Classical, Marxian, Marginalist, Neo-classical, and contemporary schools of thought.

ECON 531  Monetary and Fiscal Theory and Policy  
Three Hours: 3 Credits  
This course is a survey of modern monetary and fiscal theory and policy: basic models of macro-theory, Keynesian theory, Monetarism, public debt management, policy objectives and tradeoffs, synthesis of theory of employment and stabilization policies.

ECON 536  Statistical Methods  
Three Hours: 3 Credits  
This course develops the concepts and application of statistical methods to economic and managerial problems, including quality control, time series analysis, hypothesis testing and multivariance analysis.

ECON 541  International Trade Theory  
Three Hours: 3 Credits  
This course covers theories of international trade, factor mobility, balance of payments, exchange rates, tariffs, quotas, and other restrictions.

ECON 542  Multi-National Business and Economic Policy  
Three Hours: 3 Credits  
This course covers issues and policies in international trade, technology transfer, and investment. Prerequisite: ECON.541 or equivalent.

ECON 551  Industrial Organization  
Three Hours: 3 Credits  
This course covers the strategic interactions of firms in a market setting. An advanced microeconomic course, this course will give students a detailed understanding of how firms make decisions in a variety of market situations. Prerequisite ECON 520

ECON 555  Economics of Transportation  
Three Hours: 3 Credits  
This course covers the economic underpinnings of one of the most important industries in our modern economy. The course will present both a theoretical and practical framework for understanding the transportation industry and the impact it has on the rest of the economy. Prerequisite ECON 520

ECON 611  Managerial Economics  
Three Hours: 3 Credits  
This course deals with the theory of the firm and production function. This course takes the manager's view and emphasizes the analytical approach.

ECON 622  Advanced Econometrics  
Three Hours: 3 Credits  
This course provides a more detailed understanding of econometric techniques and the handling of large empirical problems. Students will be presented theoretical models for handling more complex data problems and will work with data to actually experience the application of these models. Prerequisite ECON 522

ECON 788  Supervised Research  
Three Hours: 3 Credits  
This course is designed to enable students to participate in research in areas of their competence under the supervision of qualified individuals. Students are required to submit research findings orally in a seminar and to submit a written report to the graduate faculty.
ENGLISH - COURSE DESCRIPTIONS

ECON 797  Thesis Guidance
Two Hours: 2 Credits
Thesis guidance provides students who have not completed their thesis in the assigned semester, with a mechanism for continuing their work under faculty supervision.

ECON 799  Thesis Seminar in Economics
Three Hours: 3 Credits
This course is designed to guide students through the process of creating and writing a thesis. Students are shown proper data collection, attribution of published materials, and research methodologies applicable to a thesis.

DEPARTMENT OF ENGLISH & LANGUAGE ARTS

ENGL 501  Materials and Methods of Research in Literature and Writing
Three Hours: 3 Credits
This course of lectures on and exercises in bibliographical research is intended to help the student to develop effective techniques of literary study and satisfactory skills in the organizing and writing of scholarly literary papers.

ENGL 509  Romanticism
Three Hours: 3 Credits
This course consists of an intensive study of selected Romantic writers such as Blake, Coleridge, Wordsworth, Byron, Shelley, and Keats.

ENGL 510  Poetry Writing I
Three Hours: 3 Credits
This course explores poetry writing in a workshop setting. Traditional forms as well as free verse and contemporary experimental rhythms are used. The focus is on the process of creating lyric poems from the initial lines and images to the finished pieces. Elements of metaphor, rhythm, tone, voice, and structure are considered.

ENGL 511  Advanced Poetry Writing II
Three Hours: 3 Credits
Students write and revise poems in a workshop setting. Knowledge of traditional forms and the poetry writing process is assumed. More complex issues of voice, metaphor, and symbol are pursued, as well as distinctions between mimetic and narrative modes of poetry. The goal of achieving polished individual poems is pursued.

ENGL 512  Short Fiction Writing
Three Hours: 3 Credits
Students write and revise short stories, criticizing one another’s developing stories in a constructive manner. Elements of plot, character, dialogue, conflict and closure are learned, largely from the perspectives of the traditional classic short story. Emphasis is given to character, action, and integration of story elements.

ENGL 513  Collaborative Television Scriptwriting
Three Hours: 3 Credits
Simulating the table work of staff writers, editors, and producers, this course requires students to work as a unit: pitching episodes for half a season, outlining several episodes, teaming to write first drafts, and conducting table readings with two revision sessions per script.

ENGL 514  Advanced Fiction Writing II
Three Hours: 3 Credits
Students write and revise short stories, criticizing one another’s work-in-progress. In addition to the basic elements of plot, character, conflict, and closure, emphasis is placed on setting, theme, style, and the subtle question of the writer’s voice. Students are encouraged to use experimental forms and to write longer stories.
ENGL 515  African-American Poetic Forms
Three Hours: 3 Credits
Students write fiction and poetry using forms rooted in African-American literature, music (especially the blues and jazz), and the spoken word. Emphasis is given to the call and response form within African-American expression, and students are encouraged to experiment with musical values in their writing.

ENGL 516  Advanced Creative Writing Projects
Three Hours: 3 Credits
Special themes, topics, or forms are pursued in a workshop designed for advanced writing students who are committed to careers as professional creative writers. Projects may include a series of interrelated short stories, a novella, or a novel. An effort is made to help each student complete a work suitable for publication.

ENGL 517  The Young Creative Writer
Three Hours: 3 Credits
This course is a seminar for creative writing teachers which explores issues of the creative imagination as these issues apply in particular to the developing artistic talent of adolescents, especially the question of how to nurture the use of such creative writing devices as metaphorical language and kinesthetic rhythms.

ENGL 518  The Literary Magazine
Three Hours: 3 Credits
This computer lab course on desktop publishing is designed for editors and teachers of writing. It covers the entire process of producing a literary magazine, from writing early drafts of prose and poetry, to layout, graphic design, editing, publishing, promoting, and distribution of the literary magazine.

ENGL 519  American Transcendentalism
Three Hours: 3 Credits
This course is primarily an examination of the achievement and influence of Ralph Waldo Emerson and Henry David Thoreau, as assessed through their major books, poems, and essays; through one or two biographies; and through selected critical studies.

ENGL 521  Modern Drama
Three Hours: 3 Credits
This course explores in-depth the representative works of major contemporary American and continental playwrights. Each student is required to pursue a corollary research project.

ENGL 531  20th Century American Fiction
Three Hours: 3 Credits
This course treats in detail selected works by Crane, Dreiser, Ellison, Fitzgerald. Hemingway, Faulkner, Wright, and Morrison, or by authors of comparable significance.

ENGL 532  20th Century British Fiction
Three Hours: 3 Credits
This course consists of selected works by British writers, such as Joyce, Woolf, Lawrence, Forster, and Waugh.

ENGL 533  The Screenplay
Three Hours: 3 Credits
This course provides students an opportunity to research and write a full-length screenplay or movie-of-the-week script, progressing from the step outline to a complete first draft.

ENGL 534  Chaucer
Three Hours: 3 Credits
This course seeks in-depth examination of the works of Chaucer other than The Canterbury Tales. It will concentrate on Troilus and Criseyde and other works in the Romance tradition.
ENGL 541 Shakespeare
Three Hours: 3 Credits
This course will devote time to the viewpoints and insights of recent scholarship and afford each member of the class an opportunity to examine in detail a specific problem in Shakespeare studies.

ENGL 543 Factual and Fictional Adaptation
Three Hours: 3 Credits
This course is designed to demonstrate the process of developing a dramatic story line from a factual or fictional source. Whether they select short or full-length projects, students must research, describe, and summarize original source material before creating the outline, treatment, and screenplay.

ENGL 551 Modern Literary Criticism
Three Hours: 3 Credits
This course deals with the major schools of modern criticism, with some attention to the application of critical principles to selected literary works.

ENGL 553 Comedy Writing
Three Hours: 3 Credits
An intense and accelerated course in planning, writing, and rewriting comic scripts, this seminar expands the study of verbal and visual techniques through research and screenings of contemporary comedy, including animation.

ENGL 555 Writing and Producing the Documentary
Three Hours: 3 Credits
This course focuses on non-fiction (non-narrative) storytelling for film and video, introducing the history and theory of the documentary, as well as the relevant fundamentals of lighting, camera, and editing.

ENGL 556 Film and Electronic Media for Business and Non-Profits
Three Hours: 3 Credits
This course focuses on the techniques, objectives, and procedures of researching, writing and producing video and electronic media for business, education, and non-profits.

ENGL 561 Introduction to Linguistics
Three Hours: 3 Credits
The purpose of this course is to provide students with a general orientation to the structural features of language (e.g., phonology, syntax, semantics, and discourse analysis). In addition, students will be introduced to such topics as language acquisition, language processing, and brain and language behavior.

ENGL 563 Advanced Dramatic Writing
Three Hours: 3 Credits
Focusing on the hour drama for television, this course examines dramatic choices and possibilities in successful scripts. Students complete a first draft and one script revision; major scenes are analyzed in class -- emphasizing character, four-act structure, dialogue, and narrative development.

ENGL 564 Professional Writing Project
Three Hours: 3 Credits
This course examines the planning, researching, and documenting of typical workplace projects. Students complete projects in their specialties and present their results using multimedia techniques.

ENGL 565 Foundations of Humanities
Three Hours: 3 Credits
Major problems of the disciplines of the humanities and the development of critical theories concerning them are examined. Interrelationships of literature, music, the visual arts, and the history of ideas are explored.
ENGL 566  Popular Culture
Three Hours: 3 Credits
This class involves the use of methodologies from both the humanities and the social sciences in the effort to interpret expressive cultural forms, specifically those that are widely disseminated in a group (that is, that are popular) as part of dynamic social intercourse. Emphasis will be on products of mass media such as television, film, print, and recordings, as well as other non-mediated aspects of popular culture such as clothing styles, fads, holidays and celebrations, amusement parks, and both amateur and professional sports.

ENGL 571  Introduction to Multicultural Literature
Three Hours: 3 Credits
Taking a holistic or conceptual approach, this course introduces students to significant multicultural and international works. In addition to discussing individual texts in their specific cultural, historical, political, and literary contexts, the course takes a comparative and interdisciplinary approach. In-depth discussions on stereotyping in plot, theme, characterization and diction will enable students to sharpen their analytical and critical abilities, as well as develop the ability to make objective or unbiased literary judgments.

ENGL 572  The Multicultural Novel
Three Hours: 3 Credits
This course explores the narrative technique of international authors, from the traditional story to post-modern examples.

ENGL 573  Professional Internship
Three Hours: 3 Credits
Viewed as laboratory work for students with little or no practical experience in the field, this internship requires 120 hours of work in television or film in a variety of settings. The supervisor evaluates the students’ work in a written report for the faculty advisor.

ENGL 577  Presenting Literary Models at the Secondary School Level
Three Hours: 3 Credits
This course introduces the student to the literary terminologies, backgrounds, and textual tools appropriate for presenting major literary figures at the secondary school level.

ENGL 581  Advanced Expository Writing
Three Hours: 3 Credits
This course is concerned with the study of the principles of effective writing, including practice in collecting and organizing material for expository papers, with emphasis on the development of effective style.

ENGL 583  Colloquium: Literature of the African Diaspora
Three Hours: 3 Credits
This course explores special topics in the literature of the African Diaspora. Emphasis will be on national literatures and on individual genres within that literature. The course will allow for specialized writing and research.

ENGL 592  Poetry Writing
Three Hours: 3 Credits
Emphasis will be on form, style, and techniques in selected poetic works.

ENGL 593  Multicultural Literature for Adolescents
Three Hours: 3 Credits
This course takes an inclusive approach to teaching young adult literature. It is structured around literary themes and genres, and within this framework, books from a variety of cultures are examined, emphasizing both the universal and culture-specific aspects of adolescence. Multicultural education theories and teaching pedagogy are integrated into the course methodology.

ENGL 594  Fiction Writing
Three Hours: 3 Credits
Emphasis will be on form, style, and techniques in selected fictional works.
ENGL 595 Supervised Reading
Three Hours: 3 Credits
Emphasis will be on reading a related body of British and American literature in order to broaden the student's grasp of literary genres and their development.

ENGL 596 African-American Literature
Three Hours: 3 Credits
This course will study poetry, fiction, drama, and literary criticism by and about the African American.

ENGL 597 The Minority Presence in American Literature
Three Hours: 3 Credits
This course will emphasize the portrayal of various minorities in the works of major writers from the Colonial Period to the present.

ENGL 598 Renaissance Studies
Three Hours: 3 Credits
Emphasis will be on the study of non-dramatic literature produced between 1501 and 1625.

ENGL 599 Computer Assisted Research
Three Hours: 3 Credits
This course examines the fundamental principles, materials, and techniques of computer-based applications (particularly database and web techniques), as these advance literary research and writing. Consideration will be given to the use of these applications in teaching and to the exploitation of other media to enhance scholarly activity.

ENGL 601 Digital Literacies and Hypermedia
Three Hours: 3 Credits
This course offers participants an opportunity to explore digital media through the lenses of literacy, rhetoric, and cultural studies, with special emphasis on broadening opportunity on the Web for underrepresented populations. The opportunities include development of new research tools, critical study of electronic discourse, and the creation of new textual forms and new modes of authorship. The class will examine practical and theoretical problems and assess their implication for scholarship and teaching in the humanities.

ENGL 608 Literature, Technology and the Production of Meaning
Three Hours: 3 Credits
This course seeks to examine the intellectual and values assumptions behind the use of technology (especially computer-based technology) in research and English language and literature instruction. The pedagogical benefits and pitfalls of technology will be debated, and students will be expected to write original papers contributing to clarification of these values issues.

ENGL 701 Old English
Three Hours: 3 Credits
This course assists students with the skill of reading Old English texts in the original. The grammar, vocabulary, syntax, and pronunciation of Old English will be studied; and the student will be expected to read Beowulf in the original and to translate minor literary and prose texts from the West Saxon dialect.

ENGL 703 Geoffrey Chaucer
Three Hours: 3 Credits
This course is a thorough examination of Geoffrey Chaucer's The Canterbury Tales, considered in the social-political contexts of the day. Skill in deciphering Middle English grammar, vocabulary, syntax, and pronunciation will be developed. Chaucer's overall aesthetic achievement and his influence upon subsequent writers will be examined through a study of recognized critical works, leading to the student's production of a substantial scholarly project.
ENGL 705 Shakespearean Dramas in Their Socio-Political Contexts
Three Hours: 3 Credits
This course examines the major comedies, tragedies, and history plays of Shakespeare with attention to the Renaissance socio-political background. [Prerequisite: ENGL 541 or Permission of the Instructor]

ENGL 707 British Humanism
Three Hours: 3 Credits
This course examines carefully the beginnings, development, and decline of humanism in Britain, considered from the point of view of major and minor prose and poetic texts. A working knowledge of Latin may be required.

ENGL 709 Milton and Puritanism
Three Hours: 3 Credits
This course considers the work of John Milton from the angle of the theological, political, and aesthetic traditions upon which he drew. Special attention is given to the theology of John Calvin, the significance of the Interregnum, and Milton’s classical and hebraic sources. Paradise Lost and Samson Agonistes will be primary texts.

ENGL 712 Romanticism and The Shelley-Godwin Circle
This course examines the influence of William Godwin, Mary Wollstonecraft, William Wordsworth, and Samuel Coleridge on important authors of the second generation of British Romantics, centering specifically on the circle formed by Mary Shelley, Percy Shelley, and Lord Byron.

ENGL 715 The Victorian Novel
Three Hours: 3 Credits
This course traces the development of British fiction during the Victorian period. It analyzes Victorian contribution to the craft of fiction and the introduction of new genres such as the school story, adventure story, colonial novel, social novel, and modern fantasy. In addition, works by representative novelists are examined for their discussion of the pressing issues of the day such as the status of women, evils of industrialism, political franchise, religious debate, universal education, and the rights of the child.

ENGL 722 Native American Literature
Three Hours: 3 Credits
Emphasis will be on oral narratives, poetry, fiction, drama, and literary criticism by and about the Native American.

ENGL 723 American Folklore
Three Hours: 3 Credits
This course introduces students to the methods and materials of folklore. Special attention will be given to the study of various genres of American folklore, but with an emphasis on the integration of these genres and the importance of contextual analysis in their interpretation.

ENGL 725 Twentieth Century African-American Women Writers
Three Hours: 3 Credits
This course examines in depth the contribution of major and minor African-American women writers.

ENGL 727 The American Novel
Three Hours: 3 Credits
This course is an in-depth treatment of the subject matter and aesthetics of such novelists as Nathaniel Hawthorne, Frances E. W. Harper, Henry James, Edith Wharton, William Faulkner, and Toni Morrison.

ENGL 729 Major African-American Novelists
Three Hours: 3 Credits
This course explores the contributions of significant African-American novelists, from the early 1800’s to the present.

ENGL 730 Major African-American Poets
Three Hours: 3 Credits
This course explores the contributions of significant African-American poets, from the beginning to the present.
ENGL 731  Twentieth Century Jewish American Literature  
Three Hours: 3 Credits  
Emphasis will be on poetry, fiction, drama, and literary criticism by and about the Jewish American. The class will treat subjects such as assimilation/rediscovery of identity, the use of traditional texts, changing gender roles, and how writers participate in both American and Jewish literary traditions.

ENGL 732  West Indian Literature  
Three Hours: 3 Credits  
Emphasis will be on poetry, fiction, drama, and literary criticism by and about the West Indian. The class will examine the synthesis of African, Asian, and European cultural experience, the linguistic play of dialect, storytelling, “formal” literature and an emergence of a West Indian Standard English.

ENGL 733  United states Hispanic-Latino/a Literature  
Three Hours: 3 Credits  
This course will examine the cultural creation of Hispanic-Latino/a writers in the United States, and will explore Hispanic-Latino/a construction of cultural identity and the development of national consciousness.

ENGL 734  American Immigrant Literature  
Three Hours: 3 Credits  
Emphasis will be on the portrayal of the immigrant experience in American letters. Students will explore common themes and issues such as the conditions leading to immigration, adjustments to and impact of the United States, and inter-generational conflict.

ENGL 740  Twentieth Century Women Authors  
Three Hours: 3 Credits  
This course considers form and content in the poetry and fiction of such women authors as Zora Neale Hurston, Virginia Wolf, Gertrude Stein, Sylvia Plath, Owendolyn Brooks, and Adrienne Rich.

ENGL 743  “Queer” Theory  
Three Hours: 3 Credits  
This course explores “queer” theory from Freud to Foucault and others.

ENGL 745  African Literature  
This course examines African Literature from the points of view of oral cultural traditions, colonial/postcolonial experiences, critical theories, and the problems of audience and language of expression. Socio-political and gender concerns in the literature will also be considered.

ENGL 747  Chinese Literature  
Three Hours: 3 Credits  
This course introduces the most important texts by male and female writers of modem Chinese literature. Emphasis will be on the genres within the literature. The course aims to provide students with the knowledge and skills to read, interpret and analyze these texts against the context of the time and culture in which they were produced.

ENGL 748  Japanese Literature  
Three Hours: 3 Credits  
This course introduces the most important texts by male and female writers of modem Japanese literature. Emphasis will be on the genres within the literature. The course aims at providing students with the knowledge and skills to read, interpret and analyze these texts against the context of the time and culture in which they were produced.

ENGL 749  Southeast Asian Literature  
Three Hours: 3 Credits  
This course examines the major periods, movements, and writers of modern Thai, Malaysian, Vietnamese, Indonesia, and Philippine literatures.
ENGL 750  Phonetics of American English  
Three Hours: 3 Credits  
This course is concerned with the fundamental phonetic structure of American English and with development of the ability to analyze the sound structure of words and symbols and to transcribe the sounds via the symbols of the international Phonetic Alphabet, as well as with a knowledge of the standard and nonstandard allophones in the major dialects of American English.

ENGL 751  Modern English  
Three Hours: 3 Credits  
This course deals with the study of modern usage, with particular attention given to the various grammatical approaches to American English, traditional, structural, and transformational.

ENGL 753  Studies in Advanced Grammar  
Three Hours: 3 Credits  
This course is a study of syntactic, morphemic, and phonemic concepts basic to a systematic description of English grammar.

ENGL 754  Social Dialects  
Three Hours: 3 Credits  
This course is a study of the variations in language, with specific focus on the class, ethnicity, language situation, and linguistic experiences of urban populations, as factors in shaping variations in language.

ENGL 755  Rhetorical Theories  
Three Hours: 3 Credits  
This course provides an historical survey of influential theories of discourse.

ENGL 756  Contemporary Composition Studies  
Three Hours: 3 Credits  
This course examines contemporary readings and research in the theory and practice of effective writing.

ENGL 758  The Style of Technical Writing  
Three Hours: 3 Credits  
The writing of effective control sentences, the art of compartmentalization, the employing of a definite paragraphing plan, the use of headings and captions, the composing of sentences of varying length, the use of the active voice, the preference for economy and vividness of language, and the avoiding of jargon are among the devices which the student is asked to master, in order to achieve an effective technical writing style.

ENGL 760  Problems in Technical Writing  
Three Hours: 3 Credits  
This is an intermediate level course in technical writing which emphasizes the three stools of the detailed proposal (technical, financial, and personnel), with emphasis upon incorporating graphical, numerical, and other supportive materials into a persuasive narrative.

ENGL 781  Models in Fiction Writing  
Three Hours: 3 Credits  
This course is a study of the techniques and methodologies of major fiction writers, with a view towards developing the skill of the specific student writer.

ENGL 782  Models in Poetry Writing  
Three Hours: 3 Credits  
This course is a study of the techniques and methodologies of major poets, with a view towards developing the skill of the specific student writer.
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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>ENGL 792</td>
<td>Film Genres</td>
<td>3</td>
<td>This course is a study of specific film genres (film noir, African-American film, comedy, etc.) and their aesthetics and narrative forms.</td>
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<tr>
<td>ENGL 797</td>
<td>Thesis Guidance</td>
<td>2</td>
<td>Thesis guidance provides M.A. students who have not completed their thesis in the Thesis Seminar (ENGL 799), a mechanism for continuing their work under faculty supervision.</td>
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<tr>
<td>ENGL 799</td>
<td>Thesis Seminar</td>
<td>3</td>
<td>This course allows M.A. students to complete a thesis under faculty supervision.</td>
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<tr>
<td>ENGL 801</td>
<td>Supervised Research</td>
<td>3</td>
<td>This seminar is designed to enable students to participate in research in areas of their competence under the supervision of qualified individuals. Students are required to use (along with traditional methods) several advanced database and other computer-assisted data-gathering techniques, to develop units in which the results of their research can be shared in a formal teaching setting, and to submit their combined findings orally to fellow students in the seminar. [Prerequisite: ENGL 599, ENGL 601, or ENGL 608]</td>
</tr>
<tr>
<td>ENGL 810</td>
<td>Literature and Psychology</td>
<td>3</td>
<td>This course considers the impact of such thinkers as Freud, Jung, and Lacan on the analysis and interpretation of literature as diverse as Beowulf, William Black, and Henry James.</td>
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<tr>
<td>ENGL 815</td>
<td>Literature and Modernism</td>
<td>3</td>
<td>This course examines the work of James Joyce, Virginia Woolf, T.S. Eliot, Gertrude Stein, Ezra Pound, Jean Toomer, and others, in light of the philosophical and aesthetic underpinnings of the modernist movement.</td>
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<tr>
<td>ENGL 820</td>
<td>Thought and Influence of W.E.B. Du Bois</td>
<td>3</td>
<td>This course considers in depth the intellectual and artistic achievements of W.E.B. Du Bois, against a background of socio-political debate and change. Major discussions will concern the philosophical influences upon such works as The Souls of Black Folk, the structure and thematic content of his poems and novels, his contributions to the art of the autobiography, and his involvement in the Niagara and Pan-African movements.</td>
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<tr>
<td>ENGL 827</td>
<td>Colloquium I: African-American Novelists</td>
<td>3</td>
<td>This is a topics course, allowing in depth focus on a particular African-American novelist or group of novelists. The authors and topics change each semester.</td>
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<tr>
<td>ENGL 828</td>
<td>Colloquium II: African-American Dramatists</td>
<td>3</td>
<td>This is a topics course, allowing in depth focus on a particular African-American dramatist or group of dramatists. The authors and topics change each semester.</td>
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<tr>
<td>ENGL 851</td>
<td>Critical Approaches to Multicultural Literatures</td>
<td>3</td>
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</table>
This course emphasizes literary evaluation, thematic analysis, and theoretical principles in discussing multicultural literature. Class discussions focus on in-depth analyses of multicultural theories and ethnic studies. Especially pertinent is the discussion of why Western theories can not be applied universally. A comparative study of key concepts such as the search for identity, interpersonal relationships, assimilation versus deracination, and involvement in social causes will foster cross-cultural understanding, critical thinking, and honesty in expressing and defending one’s considered opinions.

**ENGL 852 Postcolonial Theories and Literature**  
Three Hours: 3 Credits  
This course provides an in-depth discussion of postcolonial theory, in relation to 19th and 20th century literatures, as well as to relevant films. The course will trace the development of postcolonial theories and the related views on culture and imperialism, representation and material reality, and political and literary authority. Important theorists will be discussed, as well as twentieth century metropolitan and subaltern writers.

**ENGL 853 Diasporic Literatures**  
Three Hours: 3 Credits  
This course consists of readings, films, and class discussions intended to continue the debate emerging from the course on postcolonial theories and literatures. It will examine such concepts as diasporic identities, cosmopolitanism, and “thinking beyond the nation.” Also considered will be new cultural forms of a post-national world, such as the postcolonial cyberpunk, North African Rai music, transnational soap operas, and global internet cultures.

**ENGL 855 Womanism and Feminism**  
Three Hours: 3 Credits  
This course explores the theoretical, sociological, and aesthetic distinctions between “womanism” and “feminism,” as seen through the essays, fiction, and poetry of the leading representatives.

**ENGL 862 Literature of the Asian Indian Diaspora**  
Three Hours: 3 Credits  
This course consists of readings, films, and class discussions on a variety of texts published by Asian Indians in India, England, United States, and Trinidad. Comparative in its focus, the class will examine the location of culture and its impact on identity formation. The readings and films will allow students to recognize that the new cultural products of the Asian Indian Diaspora represent the desire and sensibility of the “Other.”

**ENGL 875 The Business Plan and Project Report**  
Three Hours: 3 Credits  
This course considers the business plan and project report as extended narratives, along with their typical organization, factual detail, management modules, and numerical and graphical components.

**ENGL 893 Seminar on Television and Society**  
Three Hours: 3 Credits  
This course examines specific film and television productions, in order to consider the role of media in society, particularly how these media affect and are affected by social behavior and belief systems. The imagery used by media will especially be assessed.

**ENGL 895 Production Design**  
Three Hours: 3 Credits  
This course considers ways of conceptualizing scripts so that they translate well, in terms of color, architecture, scale, light, costume, and physical properties.

**ENGL 898 Independent Study**  
Three Hours: 3 Credits  
This course provides in-depth research on a topic requiring a one-on-one relationship between student and professor.
ENGL 899    Independent Study II
Three Hours: 3 Credits
This course supplements ENGL 898 by providing an additional opportunity for in-depth research on a topic requiring a one-on-one relationship between student and professor.

ENGL 997    Dissertation Guidance
Three Hours: 3 Credits
Dissertation guidance provides students who have not completed the dissertation in ENGL 998 a mechanism for continuing their work under faculty supervision. Dissertation Guidance courses earn “S” grades which do not count towards the required credits needed to complete the Ph.D. program.

ENGL 998    Dissertation Seminar
Six Hours: 6 Credits
This course assists the advanced student in developing an effective dissertation, including guidelines for preliminary research, writing of the prospectus, early testing of hypotheses, drafting/ writing/ revision techniques, and acceptable dissertation formats. The grade is “CS” until the dissertation is completed and approved.
DEPARTMENT OF FINE ARTS – MUSIC COURSES

MUSA 501, 502, 503  Piano
1 or 3 Credits

MUSC 506  Music History Survey I
Three Hours: 3 Credits
This course is a study of the music, styles, and forms in European music from the period of the early Egyptians and Greeks to the end of the Baroque Period.

MUSC 507  Music History Survey II
Three Hours: 3 Credits
This course is a study of the music, styles, and forms in European music from the Classical Period into the Romantic Era.

MUSC 508  Music History Survey III
Three Hours: 3 Credits
This course is a study of the music from the mid-nineteenth century to the present.

MUSA 509, 510, 511  Voice
1 or 3 Credits

MUSC 512  Advanced Choral Literature
Three Hours: 3 Credits
A study of the music, styles, and forms found in choral repertoires.

MUSA 513, 514, 515  Organ
1 or 3 Credits

MUSC 516  Symphonic Literature
Three Hours: 3 Credits
This course is a study of the history of orchestral music forms, and style from Bach (Baroque period) to the present.

MUSA 517, 518, 519  Composition
1 or 3 Credits

MUSA 521, 522, 523  Conducting
1 or 3 Credits

MUSC 524  The History of Black Music
Three Hours: 3 Credits
This course is a study of Black musical cultures including both ethnic and concert repertoires.

MUSC 526  Introduction to Ethnomusicology
Three Hours: 3 Credits
This course is a survey of the skills, concepts and subjects of ethnomusicology. Emphasis will be given to the contrasts found in various musical cultures.

MUSC 527, 528, 529  Ensemble
1 or 3 Credits
MUSC 530 Organization and Administration in Music Education  
Three Hours: 3 Credits  
This course is a seminar on aspects of organization and administration for music educators. Prerequisite: Experience in music teaching.

MUSA 531, 532, 533 Brass  
1 or 3 Credits

MUSC 536 Form and Analysis  
Three Hours: 3 Credits  
This course is a study of various principles of organization as demonstrated in contrasting compositions.

MUSC 537 Music in the Elementary School, Advanced  
Three Hours: 3 Credits  
This course is a study of the materials and procedures in a school music program.

MUSC 538 Vocal Pedagogy  
Three Hours: 3 Credits  
This course is a study of vocal pathology, the history of performance practices, techniques in vocal coaching, and historical methods of vocal production.

MUSC 539 Piano Pedagogy  
Three Hours: 3 Credits  
This course examines the principles and procedures of piano teaching from early to advanced levels including consideration of methods, schools, and instrumental maintenance.

MUSA 541, 542-543 Woodwind  
1 or 3 Credits

MUSC 544 The Art of Accompanying  
Three Hours: 3 Credits  
This course offers guidance and experience in providing piano accompaniments to vocal and instrumental soloists including diction and interpretation.

MUSC 545 Seminar in Current Trends in Music and Music Education  
Three Hours: 3 Credits  
This course is a survey of current philosophies and objectives of music educators, including consideration of the scope and sequence of the music curricula, vocal and instrumental, on the elementary and secondary levels.

MUSC 546 Choral Arranging, Advanced  
Three Hours: 3 Credits  
This course studies advanced arranging techniques including the scoring of original and other works for chorus.

MUSC 547 Advanced Orchestration  
Three Hours: 3 Credits  
This course examines advanced arranging techniques including the scoring of original and other works for instrumental ensembles, in a variety of idioms.

MUSC 550 Electronic Music  
Three Hours: 3 Credits  
This course is a study of the history of electronic music including experiences in creating electronic music.
MUSA 551, 552, 553  Strings
1 or 3 Credits

MUSC 554  Advanced Strings
Three Hours: 3 Credits
This course is a study of advanced performance techniques on all of the stringed instruments.

MUSC 555  Advanced Woodwinds
Three Hours: 3 Credits
This course is a study of advanced performance techniques on all of the woodwind instruments.

MUSC 556  Advanced Brass
Three Hours: 3 Credits
This course is a study of advanced performance techniques on all of the brass instruments.

MUSC 562  Seminar in Instrumental Music
Three Hours: 3 Credits
This course is a comparative analysis of currently employed methods and materials; conducting techniques and repertoire; acoustics, basic instrumental techniques; performance problems.

MUSC 563  Repertoire Seminar
Three Hours: 3 Credits
This course is a systematic survey of literature for a given performance medium, including sight-reading, stylistic analysis, performance evaluation, consideration of performance practice, and historical relationships.

MUSC 564  Composition
Three Hours: 3 Credits
This course offers individual guidance in the techniques of music composition including manuscript preparation, editing, and legal protection. Minimal requirements include the submission of an acceptable and original vocal, keyboard, and instrument work, one of which must be in an extended form.

MUSA 565, 566, 567  Percussion
1 or 3 Credits

MUSC 569  Advanced Instrumental Conducting
Three Hours: 3 Credits
This course examines advanced instrumental conducting and rehearsal techniques suitable for chamber music, band, operatic and orchestra repertoires. Practical experience in conducting is provided.

MUSC 570  Advanced Choral Conducting
Three Hours: 3 Credits
This course is a study of advanced choral conducting techniques particularly applicable to choral programs in educational environments.

MUSC 573  Opera Workshop
Three Hours: 3 Credits
This course is designed to give students an opportunity to sing operatic roles on a stage in performance. Students are required to participate in culminating operatic production.

MUSC 581  Music for the Exceptional Child
Three Hours: 3 Credits
This course is designed to enable in-service music teachers to develop Individualized Educational Programs (I.E.P) in music, for the exceptional child.
MUSC 585  Contemporary Harmony
Three Hours: 3 Credits
This course examines foundations for current harmonic and compositional practice, including serial writing and jazz harmony.

MUSC 586  Comprehensive Musicianship in Education
Three Hours: 3 Credits
This course considers the synthetic study of music, history, and performance with application for music educators.

MUSC 587  World View of Music in Pedagogy
Three Hours: 3 Credits
This course offers advanced study of various ethnic music found in the United States with applications for music educators.

MUSC 590  Projects and Problems in Music Research
Three Hours: 3 Credits
This course will provide an opportunity for individual guided research on an approved subject in any significant area of music research.

MUSC 591  Composer Seminar
Three Hours: 3 Credits
This course will provide an intensive examination of the life and works of a selected composer including considerations of bibliography, editions, performance practice, and style. Oral reports, a formal paper, and recital participation will be required.

MUSC 595  Research Methods in Music and Music Education
Three Hours: 3 Credits
This course focuses on the application of methods of research to problems in the field of music or music education and the preparation of bibliographies and specialized techniques for the location, collection and treatment of data. A paper on an approved topic will be required.

MUSC 788-789  Supervised Research
Three Hours: 3 Credits
These courses are designed to enable students to participate in research in areas of their competence under the supervision of a qualified instructor. Students are required to submit research findings orally in a seminar and to submit a written report to the graduate faculty.

MUSC 797  Thesis Guidance
Two Hours: 2 Credits
Thesis guidance provides students, who have not completed the thesis in the assigned semester a mechanism for continuing their work under faculty supervision.

MUSC 795  Recital Seminar in Music
Three Hours: 3 Credits
This course involves the preparation and performance of a fifty minute recital in the student's major area of concentration, including research related to recital repertoire and the preparation of appropriate program notes. (See "Handbook for Graduate Music Students").

MUSC 799  Thesis Seminar in Music
Three Hours: 3 Credits
This course involves the preparation of a formal research paper as required by the individual major program (See "Handbook for Graduate Music Students").
DEPARTMENT OF HISTORY AND GEOGRAPHY

GEOG 503 The Geography of Maryland
Three Hours; 3 Credits
A geographical analysis of the spatial associations which exist among the historical, cultural and physical patterns of Maryland.

GEOG 505 Cultural Geography
Three Hours; 3 Credits
An examination of the role of cultures in changing the face of the earth.

GEOG 510 Introduction to Cartography
Three Hours; 3 Credits
A practical overview of the principal components of modern cartographic techniques.

GEOG 511 Intermediate Cartography
Three Hours; 3 Credits
An intensive examination of cartographic field techniques.

GEOG 561 Geography of Africa
Three Hours; 3 Credits
A geographic analysis of the physical, cultural, historical and economic patterns of Africa, with special emphasis on Sub-Saharan Africa.

HIST 501 Revolutionary America and the Constitution, 1750-1800
Three Hours; 3 credits
Emphasis will be placed on the origins of the War of Independence, the revolutionary outcomes of the war, the struggle to establish a satisfactory national government, the Constitution and the establishment of political parties.

HIST 504 Civil War and Reconstruction
Three Hours; 3 Credits
This course emphasizes the role of African Americans in the war and in post-war events; also, causes of the conflict between the North and South from the Compromise of 1850 through the success of the redemptionists at the end of the 19th century.

HIST 505 Turn of the Century America: The Age of Industrialization and Urbanization
Three Hours; 3 Credits
This is an intense study of selected topics from the period of America’s “coming of age”. These topics will include industrialization, immigration, urbanization, politics, education, popular culture, and social change.

HIST 510 History of Maryland
Three Hours; 3 Credits
This is a survey of the history of the Chesapeake Bay region with emphasis on Maryland. The region’s unique qualities of society, economy, and politics as well as race and ethnicity will be explored placing these issues in a national and international context.

HIST 515 Antebellum Free Blacks, 1800 - 1860
Three Hours; 3 Credits
This course describes and analyzes the status of free Blacks and their response to conditions in the United States. Southern African Americans as well as African Americans north of the south will be discussed.
HIST 516 African Americans to 1900
Three Hours; 3 Credits
The role of African Americans in the development of United States history will be covered from the colonial period to 1900. Emphasis will be upon the relationship of African Americans to the African Diaspora and the place of women in African American culture and society.

HIST 517 African Americans in the Twentieth Century
Three Hours; 3 Credits
The role of African Americans in the development of United States history will be covered from 1900 to 2000. Emphasis will be upon African American responses to civil rights, the African Diaspora, the place of women, and the Black culture in their communities.

HIST 518 History of Baltimore
Three Hours; 3 Credits
This course covers the history of Baltimore from its founding in 1729 to the present. Special emphasis will be placed on Baltimore’s African American community and the availability of local research sources.

HIST 519 The Ethnic Experience in America
Three Hours; 3 Credits
An investigation of the experience of Blacks, American Indians, and various immigrant groups in a historical context will be covered. Similarities and differences in the experiences of the groups, their interaction and their impact will be studied.

HIST 520 A History of American Urbanization
Three Hours; 3 Credits
This course will be a study of American urban history. Beginning with the colonial town, the course will trace the growth of the city to the present. Urban migration, way of life, industrialization, minority groups, and the growth of urban social institutions will be emphasized.

HIST 523 Women in American History
Three Hours; 3 Credits
An examination of the role of women from many classes and groups (Black, immigrant, working class, etc.) in the nation’s development will be the focus of the class. Attention will be given to major historiographic trends and controversies.

HIST 525 Legacy of the Great Depression and the New Deal
Three Hours; 3 Credits
This course examines the Great Depression and the response of the Franklin Roosevelt administration. It assesses the consequences of public policy about social services, employment and economy regulation and the evolution of organized labor.

HIST 526 The United States at War in the Twentieth Century
Three Hours; 3 Credits
This course will be a comparative study of World War I, World War II, the Korean War, and the War in Vietnam with emphasis on the changes they brought in U.S. society on the economy, women and minorities, civil liberties tradition, attitudes and values.

HIST 529 The Environmental Crisis in Historical Perspective
Three Hours; 3 Credits
This course will consider environmental problems in light of both their historical development and current implications. Social and economic effects of environmental decline will be treated, as will proposed solutions. Special emphasis will be placed on minority communities and Third World environmental problems.

HIST 530 Colloquium: African American History
Three Hours; 3 Credits
This course will explore special topics in African American history.
HIST 531  Colloquium: African Diaspora History
Three Hours; 3 Credits
Changing topics in comparative African Diaspora history will be studied in relationship to the United States, the Caribbean and Africa.

HIST 560  Colloquium in African History
Three Hours; 3 Credits
This course will examine special topics in African history

HIST 561  Pre-Colonial Sub-Sahara Africa
Three Hours; 3 Credits
Problems in the history of Sub-Sahara Africa before the partition by the Europeans will be examined both in detail and critical analysis.

HIST 562  Colonial and Contemporary Sub-Sahara Africa
Three Hours; 3 Credits
The history of Sub-Sahara Africa since the partition will be examined. Topics will include the nature of imperial rule, the development of African nationalism, and various problems of the emerging African independent states.

HIST 570  Colloquium: American History
Three Hours; 3 Credits
This course will examine special topics in American history

HIST 571  Colloquium: State and Local History
Three Hours; 3 Credits
Special topics in state and local history will be researched and discussed.

HIST 572  Latin American History
Three Hours; 3 Credits
Beginning with Pre-Columbia times, the course will survey social, economic and political developments in Central and South America from colonial times to the present, with focus upon ethnic and racial diversity as well as U. S. relations.

HIST 575  A History of the Caribbean
Three Hours; 3 Credits

HIST 598  Historiography and Historical Methods
Three Hours; 3 Credits
In this course, students develop proficiency in the basics of research, examine the issues and controversies of history as an enduring discipline, and become familiar with a representative sampling of established historians and their work. A major emphasis will be on library usage and research techniques. This course, or its equivalent, is the prerequisite for HIST 804, and all courses above the 500 level.

HIST 605  The United States Constitution and Public Policy
Three Hours; 3 Credits
This course will stress the application of constitutional law upon selected public policies and political actions throughout the history of the United States.

HIST 610  Colloquium on U.S. Public Policy
Three Hours; 3 Credits
This course will include reading, critical analysis, research and discussion of special topics in U.S. public policy.
HIST 613 History of South Africa
Three Hours; 3 Credits
The course will focus upon the struggle between indigenous groups such as the Zulus and Europeans who have attempted to control the region since the 19th century.

HIST 615 History of Traditional West Africa
Three Hours; 3 Credits
Selected ethnic groups from this region of Sub-Sahara Africa will be studied in terms of culture, economy, and politics in the pre-colonial period.

HIST 618 Recent Trends and Issues in Historiography
Three Hours; 3 Credits
Students will examine the contemporary discussion and debates among the leading historians regarding recent historical investigation and analysis. Topics will vary.

HIST 626 Colloquium in Caribbean History
Three Hours; 3 Credits
This course will cover specific topics in Caribbean history that have made a major impact upon the region.

HIST 680 Advanced History Colloquium
Three Hours; 3 Credits
Special topics of current interest in the historical profession will be discussed and researched in depth. Topics will change and/or rotate.

HIST 702 Seminar in African History
Three Hours; 3 Credits
A major research paper is required on a specific theme in African History with discussion and analysis of the theme.

HIST 705 Seminar in African American History
Three Hours; 3 Credits
A major research paper is required on a specific theme in African American History with discussion and analysis of the theme.

HIST 707 Principles of Archival Theory
Three Hours; 3 Credits
This course will provide a review of archival literature that outlines and defines the basic theories of archival administration and records management. It will also develop concepts for the practical demonstration of archival principles.

HIST 708 Oral History Approach to the Study of 20th Century United States History
Three Hours; 3 Credits
This is an introduction to methods and techniques of oral history. Supervised oral history research projects on selected topics are included.

HIST 710-711 Directed Readings
Three Hours; 3 Credits, Each course
Recent scholarship in selected historical themes will be explored and discussed will be explored. (Repeatable)

HIST 713 Seminar in African Diaspora History
Three Hours; 3 Credits
A major research paper is required on a specific theme in African Diaspora History with discussion and analysis of the theme.
HIST 715  Seminar in Twentieth Century United States History
Three Hours; 3 Credits
A major research paper is required on a specific theme in Twentieth Century U.S. History with discussion and analysis of the theme.

HIST 717  Seminar in Urban History
Three Hours; 3 Credits
A major research paper is required on a specific theme in U.S. Urban History with discussion and analysis of the theme.

HIST 722  Seminar in Public Policy
Three Hours; 3 Credits
A major research paper is required on a specific theme in U.S. Urban History with discussion and analysis of the theme.

HIST 726  Seminar in Caribbean History
Three Hours; 3 Credits
A major research paper is required on a specific theme in Caribbean History with discussion and analysis of the theme.

HIST 727  Readings in Caribbean History
Three Hours; 3 Credits
This course will examine the works and views of the major writers and historians about the multi-cultural experiences of the Caribbean. Specific topics will be examined.

HIST 729  Readings in African History
Three Hours; 3 Credits
This course is an extensive examination of the works, views, and perspectives of major historians on the multicultural experience of Africa. Specific topics will be examined at each offering.

HIST 797  Thesis Guidance
Two Hours; 2 Credits
Thesis guidance provides students who have not completed their thesis in the assigned semester a mechanism for continuing their work under faculty supervision. Thesis Guidance courses earn ‘S’ grades.

HIST 799  Thesis Seminar
Three Hours; 3 Credits
Thesis seminar provides group and one-on-one study, plus introduction to and coordination of the thesis research process. The adviser will provide the student with the framework for researching and writing on a topic of mutual agreement. The grade is “CS” until the thesis is completed and approved.

HIST 801  Advanced Readings in African American History
Three Hours; 3 Credits
Through this course the doctoral student will become firmly grounded in the literature of African American history including classics and publications on the cutting-edge of contemporary scholarship.

HIST 802  Advanced Readings in African Diaspora History
Three Hours; 3 Credits
Through this course, the doctoral student will become firmly grounded in the literature of the African Diaspora history including classics and publications on the cutting-edge of contemporary scholarship.

HIST 803  Advanced Readings in Twentieth Century United States History
Three Hours; 3 Credits
Through this course, the doctoral student will become grounded in the literature of the history of the United States in the Twentieth Century including “classics” and publications on the cutting-edge of contemporary scholarship.
HIST 804  Advanced Historiography  
Three Hours; 3 Credits  
This course equips the doctoral student with detailed knowledge and research skills necessary for developing historical interpretations and paradigms to complete the dissertation with understanding of cutting edge historiography. The prerequisite for this course is HIST 598 or its equivalent.

HIST 807  Practicum in Archival Methods  
Three Hours; 3 Credits  
This course will concentrate on methods, skills, and the practical application of historical knowledge to archival work. It includes one or more field experiences. The prerequisite for this course is HIST 707.

HIST 808  Practicum in Oral History  
Three Hours; 3 Credits  
This course will concentrate on methods, skills, and the practical application of oral history to historical research. It includes one or more field experiences in collecting oral evidence. The prerequisite for this course is HIST 708.

HIST 880-881  Independent Study  
Three Hours; 3 Credits, Each Course  
Each course provides in-depth research on a topic requiring a one-on-one relationship between doctoral student and professor.

HIST 901  Dissertation Proposal  
Three Hours; 3 Credits  
This course is an introduction to research, organization, writing, and revising of the doctoral dissertation proposal.

HIST 997  Dissertation Guidance  
Three Hours; 3 Credits  
This is the in-residency course which follows HIST 998, providing group and individual guidance. Dissertation Guidance courses earn “S” grades.

HIST 998  Dissertation Seminar  
Six Hours; 6 Credits  
This course provides group and one-on-one guidance between the student and dissertation advisor, who will provide the framework for researching and writing on the topic approved by the dissertation committee. The grade is “CS” until the dissertation is completed and approved. Students are required to take 998.
DEPARTMENT OF PSYCHOLOGY

PSYC 500  THE BIOLOGICAL BASIS OF BEHAVIOR
Three Hours; 3 credits
A survey of the anatomical structures and physiological processes that underlie psychological functioning. Topics include the role of the central nervous system, and the sensory, endocrine, and muscular systems as they contribute to the individual's adaptations to internal and external environments.

PSYC 501  ADVANCED THEORIES OF PERSONALITY
Three Hours; 3 credits
An in-depth exploration of theories and research regarding normal and abnormal personality development. Psychodynamic, humanistic, and cognitive-behavioral models are emphasized; some discussion of treatment implications related to each therapy.

PSYC 502  LEARNING AND COGNITION
Three Hours; 3 credits
A study of the major theories and models of human learning from both the traditional behaviorist perspective and the contemporary cognitive perspective and an experiential overview of how people acquire, store, and use information. This theoretical and empirical information will be applied to the understanding of human behavior in a wide variety of settings.

PSYC 503  HUMAN DEVELOPMENT
Three Hours; 3 credits
A survey of the biological, psychological, and social changes that accompany the developmental process. Includes a study of the physical, intellectual, emotional, and social development of the individual from conception to death, with special emphasis on adulthood.

PSYC 550  PSYCHOMETRIC THEORY I
Three Hours; 3 credits
Psychometric theory underlying test construction; classical test theory, item response theory, and applications. Critical examination of basic issues in assessing psychological characteristics. Validity, reliability, units of measurement; theories of aptitude and intelligence; use of multiple measures in prediction and diagnosis. Included in the discussion will be the history of testing and assessment within non-European communities and the impact of testing on these communities. There will be a critical analysis of testing and impact on culture.

PSYC 560  PSYCHOMETRIC THEORY II
Three Hours; 3 credits
Psychometric theory underlying test construction; classical test theory, item response theory, and applications. Critical examination of basic issues in assessing psychological characteristics. Validity, reliability, units of measurement; theories of aptitude and intelligence; use of multiple measures in prediction and diagnosis. Prerequisite: PSYC 550.

PSYC 580  BASIC CONCEPTS IN STATISTICS
Three Hours; 3 credits
Descriptive statistics including organizing, summarizing, reporting, and interpreting data. Understanding relationships expressed by cross tabulation, breakdown, and scatter diagrams. Designed as a one-semester introduction to statistical methods. Will include reading journal articles.

PSYC 590  APPLIED STATISTICAL INFERENCE FOR THE BEHAVIORAL SCIENCES
Three Hours; 3 credits
Common techniques (parametric) covered through two-factor analysis of variance (independent samples); hypothesis testing, confidence interval, power, robustness; SPSS AND STATA frequently used. Prerequisite: PSYC 580.
PSYC 650    DESIGN AND CONSTRUCTION OF PSYCHOLOGICAL MEASURES
Three Hours; 3 credits
Lecture-practicum involving planning, construction, administration, and analysis of a psychological test; lectures stress construct validity, item analysis, and predictive validity. Prerequisite: PSYC 560.

PSYC 660    THEORIES AND PRINCIPLES OF PSYCHOLOGICAL MEASUREMENT
Three Hours; 3 credits
Basic true-score and error models; their extensions to test reliability and test validity; problems of item analysis and weighting. Examines the rationale and validity of intelligence tests, projective measures, interest inventories, and personality measures currently in use. Focus also includes professional and ethical responsibilities associated with the assessment process and an overview of administration and interpretation procedures. Prerequisite: PSYC 650.

PSYC 670    APPLIED ASSESSMENT PROCEDURES
Three Hours; 3 credits
An exploration of current procedures employed in the evaluation of behavior. Attention is given to the observation and interpretation of behavioral information and its relationship to choice of assessment procedures. Representative measures of intelligence, achievement, aptitude, personality, and psychological motor functioning are reviewed.

PSYC 680    INSTRUMENT DESIGN AND VALIDATION
Three Hours; 3 credits
Methods for developing and validating attitude scales, questionnaires, interview schedules, and performance measures. Item writing and the development of scoring protocols; item and scale quality; reliability and validity of scores.

PSYC 690    MULTIVARIATE ANALYSIS I
Three Hours; 3 credits
An introduction to multivariate statistical analysis, including matrix algebra, general linear hypothesis and application, profile analysis, principal components analysis, discriminant analysis, and classification methods. Prerequisite: PSYC 590.

PSYC 700    MULTIVARIATE ANALYSIS II
Three Hours; 3 credits
A continuation of multivariate statistical analysis, including canonical analysis, MANOVA, and factor analysis. Prerequisite: PSYC 690.

PSYC 750    ITEM RESPONSE THEORY
Three Hours; 3 credits
Item Response Theory is the study of test and item scores based on assumptions concerning the mathematical relationship between abilities (or other hypothesized traits) and item responses.

PSYC 760    APPLIED REGRESSION ANALYSIS
Three Hours; 3 credits
Least squares estimation theory. Traditional simple and multiple regression models, polynomial regression models, with grouping variables including one-way ANOVA, two-way ANOVA, and analysis of covariance. Lab devoted to applications of SPSS regression program.

PSYC 850    TEST SCALING, EQUATING, AND LINKING
Three Hours; 3 credits
Test equating methods are used with many standardized tests in education and psychology to ensure that scores from multiple test forms can be used interchangeably. The course will introduce students to various approaches used in test equating. The special case of Kernel Equating will be a key component of the course.
PSYC 797  THESIS GUIDANCE
Two Hours; 2 credits
This course provides Master of Arts in Psychometric students with continuous faculty supervision until the department committee has approved the thesis. Thesis Guidance courses earn “S” grades.

PSYC 799  THESIS SEMINAR
Three Hours; 3 credits
This course provides Master of Arts in Psychometric students with group and one-on-one study between the student and thesis advisor. The advisor will provide the student with the framework for researching and writing a topic of mutual agreement. The grade is “CS” until the thesis is completed and approved. When the thesis is completed, a pass “P” or fail “F” grade is awarded.

PSYC 860  MULTIDIMENSIONAL SCALING AND CLUSTERING
Three Hours; 3 credits
Methods of analyzing proximity data (similarities, correlations, etc.), including multidimensional scaling, which represents similarities among items by plotting the items into a geometric space, and cluster analysis for grouping items.

PSYC 870  MULTILEVEL LONGITUDINAL DATA ANALYSIS
Three Hours; 3 credits
Multilevel models include a broad range of models called by various names, such as random effects models, multilevel models, and growth curve models. This course introduces the background and computer skills needed to understand and utilize these models.

PSYC 997  DISSERTATION GUIDANCE
Three Hours; 3 credits
This course provides Doctoral students in Psychometrics with continuous faculty supervision until the department committee has approved the dissertation. Thesis Guidance courses earn “S” grades.

PSYC 998  DISSERTATION SEMINAR
Six Hours; 6 credits
This course provides Doctoral students in Psychometrics with group and one-on-one study between the student and thesis advisor. The advisor will provide the student with the framework for researching and writing a topic of mutual agreement. The grade is “CS” until the thesis is completed and approved. When the dissertation is completed, a letter grade is awarded.

INTERNATIONAL STUDIES

INST 505  International Development Administration
Three Hours; 3 Credits
This course focuses on organizational and administrative problems of program management and the management of international organization. In addition, it will focus on the techniques and approaches used in the international development field by UN aid agencies and NGOs with emphasis on project planning, project implementation, project and community development. It will highlight the promotion of development in less developed countries.

INST 506  Human Rights
Three Hours; 3 Credits
This course focuses on the developing systems, laws and norms of the promotion of human rights. The course examines legal, political, cultural and economic aspects of human rights including ideological and cultural perspectives.
INST 510  Sub-Saharan Africa  
Three Hours: 3 Credits  
This course provides an overview of the political, economic and social histories and culture of Africa with a view towards understanding the challenges which have developed in creating the image of Africa and its peoples. The historical survey will set the tone for an examination of such topics as the expansion of foreign trade relations, nation-building, health care issues, ethno-national conflicts, development and social change.

INST 511  The Middle East  
Three Hours: 3 Credits  
This course provides an overview of the political, economic and social histories and culture of the Middle East with a view towards understanding the challenges which have developed in creating the image of the region and its peoples. Specific topics to be addressed include political violence and terrorism, civil society, foreign and domestic trade, and the impact of Islam on shaping the development and social change within the region.

INST 512  The Caribbean-Latin America  
Three Hours: 3 Credits  
This course provides an overview of the political, economic and social relations, histories and cultures of the Caribbean-Latin American region with a view towards understanding the challenges which have developed in creating the image of the region and its peoples. Specific topics to be addressed include political violence and civil society, foreign and domestic trade and its impact on shaping development and social change within the region.

INST 513  Asia  
Three Hours: 3 Credits  
This course provides an overview of the political, economic and social relations, histories and cultures of Asia with a view towards understanding the challenges which have developed in creating the image of the region and its peoples. Specific topics to be addressed include political violence, civil society, foreign and domestic trade and their impact on shaping development and social change within the region.

INST 514  Western Europe  
Three Hours: 3 Credits  
This course provides an overview of the political, economic and social relations, histories and cultures of Western Europe with a view towards understanding the challenges which have developed in creating the image of the region and its peoples. Specifically the course will provide a survey of Western European responses to major political challenges of the past and today's nation-state formation. Additional topics to be addressed include the incorporation of the working class, the development of political parties and challenges in the party system, economic management, running the welfare state, post-material and green politics, the emergence of nationalism, ethnic conflict and European integration and its impact on shaping development and social change within the region.

INST 515  Russia and the Former Soviet States  
Three Hours: 3 Credits  
This course provides an overview of the political, economic and social relations, histories and cultures of Russia and the Former Soviet States with a view towards understanding the challenges that have developed in creating the image of the region and its peoples. Specifically the course will provide a survey of the Czarist background for Soviet foreign policy, the origins and the development of the Cold War, the Sino-Soviet conflict, ethno-religious conflict, trade relations and the foreign policy of Russia and other successor states in the post-Cold War era and its impact on shaping development and social change within the region.

INST 516  The Politics of the Global Environment  
Three Hours: 3 Credits  
The course focuses on the political dimensions of trans-boundary ecological problems. It examines contemporary political responses to global environmental challenges and facilitates creative formulations of data-based analysis of these challenges. In addition, the course examines how developments in the environment interact with political consideration to influence world politics. The course highlights such environmental challenges as global warming, ozone depletion and deforestation among other critical issues impacting the international community.
**INST 520 Public International Law**  
**Three Hours: 3 Credits**  
This course is designed to assess the nature of Public International Law since the end of World War II with special emphasis on the development of law covering human rights, international disputes, war, and maritime law.

**INST 522 Multi-National Corporations and Non-Governmental Organizations in World Politics**  
**Three Hours: 3 Credits**  
This course examines the political ideologies and philosophies that shape the global community of nations. The course further examines the impact of the roles that non-state actors such as Multi-National Corporation (MNCs) and Non-Governmental Organizations (NGOs) play in shaping the political, economic and social developments of global south countries.

**INST 580 Internship in International Studies**  
**Three Hours: 3 Credits**  
This internship is designed to permit students to gain on-site experience in selected non-governmental and intergovernmental organizations and business. Periodic conferences with the faculty advisor and the agency supervisor will aid in determining the student’s program. Students will submit a written report to the graduate faculty.

**INST 601 Seminar in International Studies**  
**Three Hours: 3 Credits**  
Students will prepare a research paper in an area of interest under faculty supervision by bringing together and integrating knowledge acquired in the basic core and electives. Students will submit research findings orally and in writing.

**INST 602 Seminar in Comparative Politics**  
**Three Hours: 3 Credits**  
This course will exam alternative theoretical approaches to the study of comparative politics. Topics include (1) theory building, (2) research method, and problems, and (3) cross national research analysis. These approaches will be applied to selected political systems and will be used to analyze the systems’ responses to such challenges as political and economic development, democratization, stabilization and ethnic conflict.

**INST 603 Seminar in Research Design and Methodology**  
**Three Hours: 3 Credits**  
An examination of the tools and methods available for empirical political research involving case assessment, especially survey research on public opinion. The objective is to enable students to understand and evaluate the presentation of quantitative data as well as to add to the students own research capabilities.

**INST 788-789 Supervised Research**  
**Three Hours: 3 Credits**  
These courses are designed to enable students to participate in research activities in areas of their interest under the supervision of qualified faculty. Students are required to submit research findings orally in a seminar and to submit a written report to the graduate faculty.

**INST 797 Thesis Guidance**  
**Two Hours: 2 Credits**  
Thesis guidance provides students who have not completed their thesis in the assigned semester a mechanism for continuing their work under faculty supervision.

**INST 799 Thesis Seminar in International Studies**  
**Three Hours: 3 Credits**  
This course will provide students with the necessary tools for conducting research in the discipline.

**POSC 501 Theories of International Relations**  
**Three Hours: 3 Credits**
This course focuses on the multiple issue areas of International Relations. Specifically, the course will examine the application of various theoretical approaches, concepts and political instruments and organizations used by nations when conducting and/or responding to foreign policy issues and decision-making. Topics to be examined include leadership behavior, diplomacy, trade, the role of international organizations, the rise of ethnic conflicts and security issues which shape the international system.

**POSC 509 American Diplomacy in the Twentieth Century**  
**Three Hours: 3 Credits**  
This course will focus on the study of United States foreign policy. Specifically, the course will examine an analysis of this country’s role, resources, and policies as a great hegemonic power. Special attention is given to the relationship between foreign and domestic policies that impact and shape the decision-making process of the international community of nations.

**DEPARTMENT OF SOCIOLOGY AND ANTHROPOLOGY**

**SOCI 500 Proseminar in Sociology**  
**One Hour: 1 Credit**  
This course is designed to provide the student with an understanding of the sociological mind, and the manner in which sociologists approach, analyze, and study social phenomena. Emphasis will be placed on the development of sociology as a discipline and the major concepts, theories, issues, research methodologies, and ethical problems associated with the discipline.

**SOCI 510 Statistics**  
**Three Hours: 3 Credits**  
This course introduces students to multivariate parametric and non-parametric statistical techniques including multiple and partial correlation, multiple regression, factor analysis and path analysis, as they are applied to socio-cultural phenomena. The major focus will be on the use of computer programs (including SPSS, SAS, JMP and JMP IN) in performing these techniques.

**SOCI 511 Classical Sociological Theory**  
**Three Hours: 3 Credits**  
This course aims to provide the student with a thorough analysis of the history of sociological theory and of the specific contribution of the early thinkers in sociology. Attention is paid to the various intellectual streams of thought and to other disciplines which have influenced the development of sociology.

**SOCI 520 Techniques of Social Research**  
**Three Hours: 3 Credits**  
This course is designed to enhance the students’ knowledge and understanding of the basic research techniques and procedures used in sociological research. It focuses on the formulation of research problems, research designs, questionnaire construction, proposal writing, data collection and data analysis.

**SOCI 521 Contemporary Sociological Theory**  
**Three Hours: 3 Credits**  
The paradigms which guide current sociological thought are examined and compared. Problems with theory and application (praxis) are studied through the use of recent sociology research. Prerequisite: SOCI 511 or permission of instructor.

**SOCI 530 Black Americans in Sociological Thought**  
**Three Hours: 3 Credits**  
The treatment of African Americans in the literature and theories of sociology are studied as well as the contribution of African American sociologists to the development of the discipline.
SOCI 531 Sociology of Oppression  
Three Hours: 3 Credits  
This course will deal with the issue of oppression not only in the United States, but also in other parts of the world. As such, attention is focused on the social and historical foundations of oppression, the various forms oppression may take, and the consequences of oppression. Particular attention is paid to slavery, colonialism, and racism, as well as to oppression resulting from ethnicity, gender, class and poverty religion, political ideology, age, national origin, etc.

SOCI 540 Sociology of Education  
Three Hours: Credits  
Education is presented as a social institution in terms of its functions and its structural bases. Attention is given to the internal processes and structure of educational institutions and to their interdependent relationship with other social institutions.

SOCI 543 Race, Education, and Social Inequality  
Three Hours: 3 Credits  
Issues relevant to the education of ethnic minorities are studied. In addition, a variety of topics is considered including the values of ethnic groups toward education, their accessibility to the educational system, the extent of educational ethnocentrism, and the place of ethnic studies within policy control of the educational system.

SOCI 545 Identities and Interaction  
Three Hours: 3 Credits  
This course involves a comparative analysis of the functioning of enculturation in the establishment and maintenance of group identities. It examines (1) how older generations induce younger generations to adopt group identities; (2) the limitation of enculturation as a means of assuming the maintenance of group identity; and (3) the psychological, cultural, and social relativity of group identity.

SOCI 550 Sociology of the Family  
Three Hours: 3 Credits  
This course involves the study of the family as a social institution including its biological and cultural foundation, its historic development, and its changing structure and functions. With respect to social change, crucial disorganizing and reorganizing factors are isolated.

SOCI 552 Family Systems Around the World  
Three Hours: 3 Credits  
This course has two focuses; namely, the reasons which explain the necessity for all societies to have kinship systems and the tremendous variety they have assumed from place to place and over time; and, the nature of marriage, its place in the value system, its function as part of social contact, and its adaptability to change. Attention is also given to sexual taboos, and nontraditional modes of mating, for example, within gender with communes, and across ethnic boundaries. Included also is an examination of systems which are unilineal, double-unilineal, cognatic, and non-unilineal.

SOCI 553 The Black Family in America  
Three Hours: 3 Credits  
The domestic organization of black Americans is studied, taking into account (1) their African heritage; (2) their history of enslavement and ongoing economic and political oppression; (3) their patterns of mating, marriage, and divorce; (4) their patterns of fertility and attitudes towards the young; and (5) their increasing integration into the mainstream of American society.

SOCI 554 Intimate Relationships  
Three Hours: 3 Credits  
An understanding of contemporary courtship, and marriage, and family interaction as social psychological phenomena is provided. Consideration is also given to the major sources of marital strains and conflict in the family.
SOCI 555 Alternatives to the Traditional Family Structure
Three Hours: 3 Credits
This course examines living arrangements that substitute for, or supplement, those in the traditional family. A critique of traditional family structure is given. Among the alternative lifestyles considered are communal living, living together, bachelorhood (for both females and males), single parent families, homosexual unions, co-marital relation ships and serial monogamy. Also considered are lifestyles influenced by a variety of religious and counterculture ideologies.

SOCI 560 Seminar in Urban Sociology
Three Hours: 3 Credits
In this course, students are presented with a, broad theoretical matrix in, which to examine the process of urbanization in rela-
tionship to ecological organization, technological change, planning practice, and development policy.

SOCI 562 Collective Behavior
Three Hours: 3 Credits
This course deals with the concept of collective action (sometimes referred to as collective behavior) and the various theories that are employed to explain this phenomenon, not only in the United States but also in other parts of the world, the social factors that account for the emergence of this form of group action, efforts that are made to contain it and the consequences of such action. Particular attention is paid to such forms of collective action as slave rebellions, strikes, protest demonstrations, fads, riots, and especially anti-colonial movements and other categories of social movements.

SOCI 564 Race and Ethnic Relations
Three Hours: 3 Credits
The sociological responses of ethnic groups to the special character and problems of contemporary urban life are examined and analyzed. Also included is the study of the effects of ethnicity, on people’s accessibility to, and service by, political structures, business and financial organizations, and public and private service agencies, and the type of coverage which they receive by mass media.

SOCI 565 Sociology of Migration
Three Hours: 3 Credits
This course deals with the various social factors that under gird both internal and external migration. As such, the course focuses on a number of theories of migration, structural factors that conduce to migration, and the social consequences of migration. Special attention is paid to the concept of migration, the effect of poverty and other economic factors, racial/ethnic discrimination, political persecution, etc., on migration; and the impact of conflicts with host populations, competition for scarce infrastructural resources, etc., that result from migration.

SOCI 566 Sociology of Baltimore
Three Hours: 3 Credits
This course provides students with an opportunity to use theories and principles associated with urban sociology for the systematic and diachronic study of the Baltimore metropolitan area as an urban system. A particular focus of the course is the treatment of culture, social organization, and social problems within the research context of a case study. Students may undertake, within a supervised context, the analysis of demography, ecology, crime, criminal justice, education, transportation, work, racial and ethnic relations, housing, zoning, commerce, and neighborhood organization as they pertain to the Baltimore metropolitan area.

SOCI 570 Seminar in Applied Sociology
Three Hours: 3 Credits
This course examines the present application of sociology to the resolution of social problems and focuses also on the role of the applied sociologist in the non-academic work setting. This course is required for those students who choose the Master of Science option.
SOCI 600 Evaluation Research
Three Hours: 3 Credits
This course provides students with an understanding of program evaluation as it encompasses systematic observations that are designed to determine whether a social program or practice achieves its goals. In particular, students will be exposed to that aspect of applied sociological research that focuses on program design and planning, program monitoring, outcome evaluation, and economic efficiency, and the employing of science to gather valid and reliable data.

SOCI 797 Thesis Guidance
Two Hours: 2 Credits
Thesis guidance provides students, who have not completed their thesis in the assigned Semester, a mechanism for continuing their work under faculty supervision.

SOCI 799 Thesis Seminar in Sociology
Three Hours: 3 Credits

TELECOMMUNICATIONS MANAGEMENT

TELC 500 Urban Telecommunications Networks
Three Hours: 3 Credits
Examines the overall field of Telecommunications. Uses in business organizations, industry and government, customer demand, growing importance of careers in telecommunication, public and private telecommunication networks, transmission networks and transmission channels.

TELC 510 Telecommunications Structure and Regulation
Three Hours: 3 Credits
The telecommunications industry, and its regulation/deregulation by the federal, state, and local governments, is critically examined. "Telecommunication" is defined broadly as public and private electronic communication, such as broadcasting (local and network), cable and satellite-delivered television, wired and wireless telephone systems, and computer networks (Internet and WWW). Specifically, the course will investigate the historical and developing structures of these different electronic mass media industries, as well as provide in-depth analysis of those companies that provide common carrier services. Additionally, it will explore the influence of federal, state, and local administrative agency rulemakings, regulatory agencies such as the FCC, state public utility commissions, tariffs, and laws e.g., the Telecommunications Act of 1996, on the changing structure of the telecommunications industry. Current issues relating to the structure and regulation of the telecommunications industry will be discussed.

TELC 512 Communication Theories
Three Hours: 3 Credits
Study of the literature related to the interpretation, criticism and validation of contemporary examination theory as related to telecommunications.

TELC 520 Communications Technologies
Three Hours: 3 Credits
How technology and media affect the human communication processes. Impact of telecommunications technology on business, education, and urban life.

TELC 570 Telecommunications Research Methods
Three Hours: 3 Credits
Applications of data and interpretation for management decisions. Ratings and other secondary sources of data, surveys, experimental testing of programs and media campaigns and critical evaluation of research.
TELC 531  Cable Broadband Communications  
Three Hours: 3 Credits
Technical, legal, operational and service dimensions of cable television in an urban setting.

TELC 532  Telecommunications Services  
Three Hours: 3 Credits
Examination of broadcasting, pay-cable, pay-for-view television, subscription, satellite master antenna television, multi-channel, multipoint distribution services, low power television, direct broadcast satellite, teletext and video text.

TELC 533  Data Processing and Communication  
Three Hours: 3 Credits
Effects of computers on the creation, control, content and flow of communication in organizations and society. Work related to this course will be done in a laboratory setting in order to provide experience with computing systems.

TELC 535  Data Communications Systems  
Three Hours: 3 Credits
Discussion of the components of data communications systems: Development of data codes, data transmission controls, predominate information codes, specialized data transmission techniques and line configurations.

TELC 540  Organizational Communication  
Three Hours: 3 Credits
Examination of both the Coordination and assignment of duties as contrasted with management style. Discussion of the technical human and conceptual skills necessary within the modern organization. The role of the media manager as it relates to interpersonal communication, external conditions and as a source of information.

TELC 541  Strategic Planning and Control  
Three Hours: 3 Credits
Evaluation of organizational needs and how they are meeting by existing systems. Proposal of alternative systems, traffic studies, future usage patterns, grade of service and system evaluation.

TELC 542  Telecommunications Management  
Three Hours: 3 Credits
Examination of the historical, social, cultural, legal and economic structure and operation of media organizations in the United States. The role of management formulation of policy and the process of decision-making.

TELC 543  Financial Management  
Three Hours: 3 Credits
Examination of media financial planning. Discussion of the manager as financial planner, developer of action plans, examiner of assets and liabilities. Methods of financial reporting and financial projections.

TELC 544  Media and Social Services  
Three Hours: 3 Credits
Use of mass media in urban-based community campaigns related to health, public safety, education and other social services. Discussion will cover the role of nonprofit organizations in setting research strategies and campaign evaluation.

TELC 550  Audio Studio Production Management  
Three Hours: 3 Credits
Examination of non-broadcast and broadcast audio production systems. Understanding of formats, demographic trends, financial status and employment patterns.

TELC 551  Video Studio Production Management  
Three Hours: 3 Credits
Examination of growth of noncommercial and commercial video along with non-broadcast applications and how they relate to production of programming, development of revenue and financial trends.

**TELC 552 Programming Analysis**  
*Three Hours: 3 Credits*  
Discussion of formulation of action plans. How they relate to media research, sources of audience research, research development and programming.

**TELC 553 Non-Broadcast Systems**  
*Three Hours: 3 Credits*  
Future of video in a corporate setting how private television is being used, teleconferencing, in-house production systems, supplemental outside services, selective distribution and organization and staffing within the non-broadcast setting.

**TELC 554 Community Cable Operations**  
*Three Hours: 3 Credits*  
Critical examination of the development of local cable television origination, community cable television channel rules, regulations, and policies, how cable television channels are used in urban settings, and interconnection among urban cable television systems. Specifically, an analysis of the development of public, educational, and government (PEG) access cable channels, including leased cable access, will be investigated from multiple perspectives i.e., historical, legal, social, economic and technological. Also, the roles and interactions of particular stakeholders i.e., local franchising authorities, cable operators, cable access audiences, community access center managers, and advocacy groups, will be critically reviewed. Current issues relating to local cable television access channels will be discussed.

**TELC 555 Production Workshop**  
*Three Hours: 3 Credits*  
Laboratory course to develop advanced production skills in both direction and production. Student teams will be expected to produce a minimum of two programs either for audio, video or cable formats.

**TELC 600 Telecommunications Internship**  
*Six Hours: 6 Credits*  
Practical, community-based work experience. Student will work with an outside institutional or agency in order to polish the skills necessary to function in a management role. Students will be expected to master specific competencies with a reasonable amount of supervision within the area of their desired specialization. For a portion of the seminar, each student will function as a full-time professional within a designated agency.

**TELC 650 Telecommunications Seminar**  
*Three Credits; 3 Hours*  
In the final semester of the program, students will enroll in a coordinated project seminar. The seminar will examine current problems related to telecommunications law, management, structure, and production. Students will be required to produce a final project, a design prospect, paper, or other agreed-upon appropriate work that corresponds to their area of special interest.
DOCTOR OF PHILOSOPHY- BUSINESS ADMINISTRATION

EARL G. GRAVES SCHOOL OF BUSINESS & MANAGEMENT

OFFICERS OF ADMINISTRATION

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E-mail: othomas@moac.morgan.edu

DOCTOR OF PHILOSOPHY- BUSINESS ADMINISTRATION (Ph.D.)

Franklyn Manu, Ph.D.
Graduate Coordinator, Ph.D. Program
McMelen Hall, Room 214-C
Tel: (443) 885-3357; Fax: (443) 885-8252
E-mail: phdsbm@moac.morgan.edu

Objectives
The Ph.D. program prepares graduates for careers in teaching, research and consulting in various functional areas of business. Graduates of the program are expected to make significant contributions to the advancement of knowledge of business practices through research and consulting and to disseminate such knowledge through their teaching.

The curriculum is designed to provide graduates with in-depth exposure to a specific business content area, sophisticated analytical methods, and college teaching techniques. This last feature is unique to the program and is structured around a four-course sequence covering different aspects of university-level teaching.

Admission
Admission into the Doctoral Program is in the Fall semester only. The deadline for applications is February 1. All applications must be complete and include all supporting documents and test scores before they can be considered. Applicants are also strongly advised to arrange for an interview with members of the Doctoral Program Committee as part of their application whenever possible.

Criteria for Admission
• A Masters Degree in Business from a AACSB-accredited college or university with a GPA of 3.0 or higher. Students without such backgrounds will be required to take MBA level business courses at an AACSB-accredited institution in order to ensure adequate preparation prior to enrollment in required doctoral courses. Outstanding applicants who only possess a Bachelor's degree may be considered for admission if they possess a GPA of at least 3.5.
• A satisfactory score on the Graduate Management Admissions Test (GMAT) taken no more than three years prior to applying;
• For students from non-English speaking countries, a minimum score of 550 on the Test of English as a Foreign Language (TOEFL); the exam must not have been taken more than three years prior to applying. This requirement may be waived for students who have had at least a year of university-level education in English;
• Three completed recommendation forms from people who are qualified to comment on the applicant’s academic preparation and potential for success in the Doctoral Program;
• An essay on professional plans and what role the doctorate will play in attaining them.

Transfer of Credits
Doctoral level foundation courses taken at other universities may be credited towards the Morgan State University program if they are judged to be equivalent by the Doctoral Program Committee. A maximum of 12 credits may be transferred in this manner.
Residency Requirements and Time Limits
With the exception of credits transferred at the beginning of a student's program, all courses must typically be taken at Morgan State University. Transfers of credits from other institutions will be granted by the Doctoral Program Committee in very rare cases. Students must pass written and oral comprehensive examinations. Written and oral comprehensive examinations covering the major area of study are scheduled by the Fall of the third year of enrollment in the program. A written comprehensive examination covering the minor field is also scheduled in the Summer of the first year of enrollment. A dissertation proposal must be successfully defended within 12 months of passing the comprehensive examination in the area of specialization.

All requirements for the program must be completed by the end of the sixth year. An extension of not more than one academic year may be granted under extenuating circumstances. Such an extension may only be recommended by the Doctoral Program Committee and approved by the School of Graduate Studies.

Dismissal from the Program
A student will be dismissed from the program if s/he fails any of the comprehensive exams twice. Students can also be dismissed if, in the view of the Doctoral Program Committee, they are not making satisfactory progress in their program of study after a written warning from the committee. Examples of instances that may lead to such dismissal include, but are not limited to the following:

• Failure to take scheduled comprehensive exams.
• Failure to participate in required professional development activities such as faculty and other research seminars.
• Failure to complete assistantships in a satisfactory manner.
• Failure to follow an approved study plan.
• Exceeding time limits for completing various stages of the program.

Advising
Each student is assigned an academic advisor upon enrollment in the program and must complete an individual program of study form. The advisor provides guidance to the student on matters relating to the program. At the dissertation stage, the student selects a dissertation committee and a chairperson who act as advisors during the process.

Graduation Requirements
• Pass written and oral comprehensive examinations covering major and minor areas of an approved course of study;
• A grade point average of at least 3.0, on a 4 point scale, in all courses taken at Morgan State University;
• A minimum grade of B in each course taken in the area of specialization;
• No more than two grades of C or less may be earned in the program;
• Successful oral defense of a proposed and completed dissertation;
• Submit four (4) copies of the revised (where applicable) and final draft of the dissertation to the Director of the Doctoral Program.

Elements of Business Operations
Each student is required to demonstrate mastery of the major elements of business administration prior to formal doctoral candidacy. The elements cover such functional areas as accounting, finance, organizational behavior, marketing, information systems, general and operations management. They are designed to give students a broad knowledge of business operations. The following School of Business & Management (SBM) courses address these areas:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ACCT 500</td>
<td>Accounting Principles for Managers</td>
</tr>
<tr>
<td>FIN 501</td>
<td>Overview of Economics</td>
</tr>
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<td>BUAD 521</td>
<td>Organizational Behaviors and the Environment of Business</td>
</tr>
<tr>
<td>INSS 540</td>
<td>Quantitative and Statistical Skills for Managers.</td>
</tr>
<tr>
<td>INSS 586</td>
<td>Operations Management</td>
</tr>
</tbody>
</table>
Every student must satisfy these 3-credit prerequisites prior to beginning formal doctoral study. Each course requirement can be satisfied in one of 3 ways:

- By taking and passing an equivalent course to SBM courses from an AACSB-accredited institution with a grade of at least B, a maximum of five years prior to admission;
- Possession of an undergraduate major in the subject area; FOUNDATION (18 Credits) Other Foundation Courses*
- Passing a proficiency examination administered by the relevant department with a grade of at least B.

*Note: Higher level courses may also be required depending on area of specialization.

Foundation (21 Credits)
The Foundation is common to all students and is designed to provide students with an understanding of the philosophy and tools of scientific inquiry. Emphasis is placed on developing students' research skills. Particular attention is placed on quantitative and qualitative methods involved in research processes. All foundation courses must be completed prior to enrolling in specialization courses. The specific courses will be partly discipline-specific, but all students must take and pass the following as part of their foundation:

BUAD 700 Quantitative Methods
BUAD 701 Applied Statistics I
BUAD 702 Foundations of Scientific Research
BUAD 703 Measurement Theory and Method
BUAD 705 Applied Statistics II

Other Foundation Courses*

BUAD 704 Qualitative Research Methods
BUAD 883 Multivariate Techniques
FIN 820 Microeconomic Theory
FIN 821 Macroeconomic Analysis
MGMT 860 Seminar in Organizational Behavior
MGMT 861 Seminar in Organization Theory

*Two of these courses are chosen by students with the approval of their advisors.

Area of Specialization (18 Credits)
Each area has a separate set of requirements including research skills and methodology courses. Specific courses are chosen by students with the approval of their advisors. Morgan offers specializations in accounting, finance, information systems, management, and marketing. The goal of specialization is to give students a firm grounding in a functional area of business. This area reflects the student's chosen area of theoretical and intellectual interest. Courses are designed to develop knowledge and analytical capabilities to contribute to intellectual developments in the field. Following is a list of course offerings:

**Accounting**

ACCT 800 Financial Accounting Seminar
ACCT 801 Managerial Accounting Seminar
ACCT 802 Taxation Seminar
ACCT 803 Auditing Seminar
ACCT 804 Accounting Information Systems Seminar
ACCT 805 Accounting Research Seminar I
### DOCTOR OF PHILOSOPHY - BUSINESS ADMINISTRATION

<table>
<thead>
<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>ACCT 806</td>
<td>Seminar in Selected Accounting Topics</td>
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<tr>
<td>ACCT 807</td>
<td>Empirical Research in Capital Markets</td>
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#### Finance

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<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>FIN 822</td>
<td>Theory of Corporate Finance</td>
</tr>
<tr>
<td>FIN 823</td>
<td>Seminar in Investment Analysis</td>
</tr>
<tr>
<td>FIN 824</td>
<td>Financial Economics</td>
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<tr>
<td>FIN 825</td>
<td>Applied Econometric Methods</td>
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<tr>
<td>FIN 826</td>
<td>Empirical Research in Finance</td>
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<tr>
<td>FIN 830</td>
<td>Derivatives Markets</td>
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<tr>
<td>FIN 831</td>
<td>International Finance Seminar</td>
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#### Information Systems

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<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>INSS 840</td>
<td>Foundation in Information Systems</td>
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<tr>
<td>INSS 841</td>
<td>Information Systems Strategy</td>
</tr>
<tr>
<td>INSS 842</td>
<td>Information Systems Seminar I</td>
</tr>
<tr>
<td>INSS 843</td>
<td>Information Systems Seminar II</td>
</tr>
<tr>
<td>INSS 850</td>
<td>Dynamics of Information Systems in Organizations</td>
</tr>
<tr>
<td>INSS 851</td>
<td>Knowledge-Based Information Systems</td>
</tr>
<tr>
<td>INSS 852</td>
<td>Enterprise-Wide Infrastructure</td>
</tr>
<tr>
<td>INSS 853</td>
<td>Management Databases</td>
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#### Management

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<tbody>
<tr>
<td>MGMT 870</td>
<td>Seminar in Human Resource Management</td>
</tr>
<tr>
<td>MGMT 871</td>
<td>Seminar in Business &amp; Society</td>
</tr>
<tr>
<td>MGMT 872</td>
<td>Seminar in Strategic Management</td>
</tr>
<tr>
<td>MGMT 873</td>
<td>Comparative Management Systems</td>
</tr>
<tr>
<td>MGMT 874</td>
<td>International Business Seminar</td>
</tr>
<tr>
<td>MGMT 875</td>
<td>Special Topics in Management</td>
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<tr>
<td>MGMT 876</td>
<td>Research Implementation</td>
</tr>
<tr>
<td>MGMT 877</td>
<td>Entrepreneurship Seminar</td>
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#### Marketing

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<tr>
<th>Course Code</th>
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</thead>
<tbody>
<tr>
<td>MKTG 880</td>
<td>Foundations of Marketing</td>
</tr>
<tr>
<td>MKTG 881</td>
<td>Consumer and Organizational Buying Behavior</td>
</tr>
<tr>
<td>MKTG 882</td>
<td>Seminar in Strategy and Global Marketing</td>
</tr>
<tr>
<td>MKTG 884</td>
<td>Research Implementation</td>
</tr>
<tr>
<td>MKTG 890</td>
<td>Social Issues and Public Policy in Marketing</td>
</tr>
<tr>
<td>MKTG 891</td>
<td>Special Topics in Marketing</td>
</tr>
</tbody>
</table>

#### Minor Field (9 Credits)

The purpose of the minor field is to prepare students to be effective teachers at the university level. It is also designed to give them skills in case research, writing and presentation. Recognizing the importance of teaching skills in career development, the courses are designed to guide students in understanding relevant issues associated with teaching college students. Emphasis is therefore placed on developing pedagogical skills and knowledge of psychological and other bases of learning. These are the courses that are offered:

<table>
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<tr>
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<tbody>
<tr>
<td>BUAD 711</td>
<td>Professional Development Seminar In Business I</td>
</tr>
<tr>
<td>BUAD 712</td>
<td>Seminar In Case Writing</td>
</tr>
<tr>
<td>BUAD 713</td>
<td>Professional Development Seminar In Business II</td>
</tr>
</tbody>
</table>
Dissertation (12 Credits)
The final stage of the Doctoral Program requires a student to write and defend a dissertation. A dissertation must address a major research issue. It is expected to result in a significant contribution to the received body of knowledge in the field of study. Students work under the guidance of a dissertation committee and as part of their preparation enroll in 6 credits of dissertation seminar. The seminar is designed to guide students in their development of a proposal, proposal defense, research implementation, and dissertation defense.

After completing six credits of dissertation seminars, a student presents a dissertation proposal to an advisory committee. The committee consists of a four or five member dissertation committee. Members of the Dissertation Committee are selected by the student but must meet the following requirements:

The Chairperson must be from the major area.
One member must be from the major area, excluding the chairperson.
At least one other member must be from outside the area of specialization. The Advisory Committee must certify to the Doctoral Office that there is justification for a formal review before a proposal defense is scheduled.

COURSE OFFERINGS FOR THE DISSERTATION:
BUAD 997   Dissertation Guidance
BUAD 998   Dissertation Seminar
MASTER OF BUSINESS ADMINISTRATION (M.B.A)

H. William Vroman, Ph.D.
Director of the MBA
Earl G. Graves School of Business & Management
McMehan Hall, Room 101
Tel: (443) 885-3396; Fax: (443) 885-8256
E-mail:gomba@jewel.morgan.edu

The Morgan MBA
The Morgan MBA helps students become competitive for positions in managerial career tracks in leading organizations. Building careers in the leading business, government and not-for-profit worlds requires highly trained leadership skill sets. These skill sets include the ability to diagnose complex situations, solve problems completely, make decisions in a timely way, communicate powerfully and confidently and take leadership roles in the organization.

The Morgan MBA Produces These Learning Outcomes:
A graduate with confidence and pride in his/her education supporting the potential for leadership in organization settings.
A graduate with an understanding of business, the competitive marketplace, current practices and fluency in the language of business.
A graduate with the poise and strength to maintain high ethical and moral standards and contribute to corporate social responsibility.
A graduate with an understanding of the importance of data and analysis in the effectiveness of business decision.
A graduate that has a grasp of technology and how it is integrated into process, personal effectiveness and organization action.
A graduate that can work effectively in team settings regardless of changing settings and demanding time pressures to accomplish projects.
A graduate with the attitude that his/her work at Morgan is the first step in a life-long education.

Admission
Admission into The Morgan MBA requires proof that the candidate can compete successfully in the program and move to a career in a leading organization. To do this the candidate provides information in terms of an essay, work experience, undergraduate education and test results to prove his/her ability to compete successfully.

These items are required for admission*:
- Undergraduate transcripts from all undergraduate schools;
- Scores on the Graduate Management Admission Test (GMAT)*;
- Three letters of recommendation;
- A detailed resume;
- An essay on professional plans and what role the MBA will play in attaining them. An interview might also be required.
- Applications are considered on a rolling basis.

*Inquire if you recently completed an accredited masters program or have significant experience in organizations.

The Foundation Courses are intended to provide students with a sound understanding of organizations and business. These fundamental concepts are necessary to compete in the 600 level Core Courses. A person’s background and undergraduate transcript will be analyzed to highlight relevant knowledge to compete effectively. Foundation courses will be required to fill in required knowledge. Business school graduates with a B or better in required courses taken within a 5 year period will have foundation courses waived.
Graduation
A student has to complete all required Foundation Courses, Core Courses and Electives in the requisite order. Foundation courses should generally precede Core which is followed by elective courses. The Strategic Management course has to be taken in the last and graduating semester along with the comprehensive exam. Depending on background and experiences, an MBA at Morgan can range from 33 hours to 57 hours. Application deadlines for graduation and comprehensive tests have to be followed.

During the final term, a comprehensive exam is required to provide the student an opportunity to consolidate and show his/her knowledge. The comprehensive indicates the students’ ability to diagnose a complex case and remedy any issues they uncover. A student must pass the comprehensive in order to graduate.

Courses should be taken at the Morgan campus during the MBA. There might be exceptional circumstances that require a class to be taken elsewhere. This requires approval of the Director of the MBA or Dean of the School of Business and Management.

Foundation Courses: 24 Credits
The Foundation courses can be intermixed with Core courses depending on the scheduling of the required Foundation course. In general, Foundation course requirements should be taken when they are offered. Under no circumstance should 600 level courses be taken before or with the prerequisite Foundation course.

ACCT 500    Accounting Principles for Managers
FIN 501     Overview of Economics
FIN 520    Essential Financial Concepts for Managers
BUAD 521  Organizational Behaviors and the Environment of Business
INSS 586    Operations Management
INSS 540    Quantitative and Statistical Skills for Managers.
MKTG 567   Marketing and the Social Environment
INSS 587    Fundamentals of Information Technology for Managers

Core Courses: 33 Credits (21 Core: 12 Electives) (Prerequisites In Parentheses)
The following 7 courses, 21 credits, will be required of all students. These courses present a series of courses for students to expand their understanding of how organizations work and simultaneously build leadership skill sets.

ACCT 600    Accounting for Decision Making (ACCT 500)
FIN 620    Corporate Finance (FIN 520)
BUAD 625  Organizational Leadership and Ethics (BUAD 521)
BUAD 647  International Business Management (BUAD 521)
MKTG 675 Advanced Marketing Management (MKTG 567)
INSS 687 Strategic Information Systems (INSS 587)
BUAD 699 Strategic Management (ACCT 600, BUAD 647, FIN 620, INSS 687, MKT 675; to be taken in semester of intended graduation)
XXXX XXX Electives (12 credits)

MBA Electives
Students must select 4 courses from the list of courses below that they believe will round out their views on managing. These courses are rotated so students can broaden their managerial mind-set.

Finance
FIN 630    International Financial Management (FIN 520)
FIN 631    Financial Institutions and Markets (FIN 520)
FIN 632    Investment Analysis (FIN 620)
FIN 633    Risk Analysis and Insurance (FIN 620)
### Business Administration
- **BUAD 650** Business Research Methods
- **BUAD 652** Strategic Human Resource Management (BUAD 521)
- **BUAD 654** Organizational Development and Consulting (BUAD 521)
- **BUAD 656** Essentials of Negotiations
- **BUAD 658** Current Issues in International Business
- **BUAD 664** Entrepreneurship (ACCT 500, FIN 520)
- **BUAD 666** Internship in Business (With permission)

### Marketing
- **MKTG 676** International Marketing (MKTG 675)
- **MKTG 677** Promotions Marketing (MKTG 675)
- **MKTG 681** Marketing in the Services Organization (MKTG 675)

### Information Systems
- **INSS 691** Project Management
- **INSS 692** Knowledge-based and Collaborative Systems (INSS 687)
- **INSS 693** Decision Support Systems (INSS 687)
- **INSS 696** Current Issues in Information Technology (INSS 687)
COURSE DESCRIPTIONS – BUSINESS ADMINISTRATION (PH.D)

FOUNDATION

BUAD 700  Quantitative Methods
Three Hours: 3 Credits
This course provides an intensive coverage of mathematical principles, techniques, and applications relevant to the study of business and economics.

BUAD 701  Applied Statistics I
Three Hours: 3 Credits
This course provides an overview of mathematical statistics with particular emphasis on regression analysis and statistical modeling. The basic focus is to introduce students to the use of regression analysis and other techniques as tools for conducting empirical research.

BUAD 702  Foundations of Scientific Research
Three Hours: 3 Credits
This course introduces a range of traditions from the social sciences to highlight different positions from a philosophy of science and epistemology perspective. It focuses on critical issues that guide contemporary research, including dominant conceptual paradigms in various disciplines, research design, hypothesis development, and the application of quantitative and qualitative techniques.

BUAD 703  Measurement Theory and Method
Three Hours: 3 Credits
This seminar provides a broad understanding of the theoretical and methodological issues in social science research. It includes an in-depth review of the basic principles of measurement (i.e., Classical Test Theory, reliability, and validity). It also emphasizes scale development and assessment procedures, with the aim of bringing together substantive and methodological issues in measurement.

BUAD 704  Qualitative Research Methods
Three Hours: 3 Credits
This course covers three broad areas: nature and underpinnings of qualitative research, including the politics and ethics of qualitative inquiry; major strategies used to perform qualitative research; methods and problems of gathering, analyzing and interpreting qualitative data.

BUAD 705  Applied Statistics II
The course is the second of a two-semester sequence of statistics courses required of all doctoral students. It focuses on hypothesis testing, regression, multivariate analysis and other topics relevant to research in the various areas of business.

BUAD 883  Multivariate Techniques
Three Hours: 3 Credits
This course provides a broad understanding of the assumptions, principles and applications of a wide range of multivariate data analytic techniques regularly used in contemporary business research. It features techniques such as Principal Components/Factor Analysis, Canonical Correlation Analysis, Multiple Discriminant Analysis, Cluster Analysis, Regression and Path Analysis, and Latent Variable Structural Equations Modeling. This course involves extensive use of statistical packages (e.g., SPSS, SAS, LISREL, and/or EQS.)

FIN 820  Microeconomic Theory
Three Hours: 3 Credits
Comprehensive coverage of economics theories explaining the behavior of firms, individuals, and markets – under a competitive and non-competitive market structure.
FIN 821    Macroeconomic Analysis
Three Hours: 3 Credits
Course focuses on theories explaining the functioning of national economies and the international economic environment. Emphasis is placed on both classical and current theories.

MGMT 860    Seminar in Organizational Behavior
Three Hours: 3 Credits
Scientific theories of individual and group behavior are examined and applied to topics such as leadership, managerial risk-taking, organization culture and change processes. Processes of perception, judgment, attribution and decision making are studied. Finally, since organizational behavior occurs mostly in social settings, the course introduces the social psychological effects of social settings on behavior with respect to motivation, performance, job satisfaction, group processes and organization justice.

MGMT 861    Seminar in Organization Theory
Three Hours: 3 Credits
In this seminar, doctoral students are introduced to the principal theoretical perspectives in organization theory, such as resource dependence theory, institutional theory, structural-contingency theory, population ecology and transaction-cost analysis. These perspectives are used to guide understanding of organization change, innovation and effectiveness in corporate settings. In addition, empirical research is examined to illustrate how different theoretical perspectives require different empirical research methodologies.

ACCOUNTING

ACCT 800    Financial Accounting Seminar
Three Hours: 3 Credits
The purpose of the seminar is to familiarize students with the broad spectrum of empirical research in accounting. The emphasis is on the market based accounting research. Students are expected to gain fundamental skills in developing research ideas and conducting empirical research in financial accounting.

ACCT 801    Managerial Accounting Seminar
Three Hours: 3 Credits
This course provides an in-depth exposure to current research issues relating to managerial accounting and decision-making in the areas of cost accumulation and product costing, planning and control.

ACCT 802    Taxation Seminar
Three Hours: 3 Credits
Examines federal income taxation of sole proprietors, partnerships, corporations, fiduciaries, and individuals with an emphasis on tax consequences of business and investment decisions. Enhances ability to identify, analyze, and provide potential approaches via review of existing relevant literature while examining accepted and innovative modes of research methodology.

ACCT 803    Auditing Seminar
Three Hours: 3 Credits
This course focuses on providing an in depth analysis of current auditing issues. Auditing is approached as a decision-making risk based discipline. An in depth analysis of different decision and judgment models are examined in an auditing context.

ACCT 804    Accounting Information Systems Seminar
Three Hours: 3 Credits
Examines contemporary issues in accounting information systems, including alternative processing methods, system evaluation and selection, and computer-based audit and security. Enhances ability to identify, analyze, and provide potential solutions to persistent and current accounting information systems issues. Focus includes theoretical and practical approaches via review of existing relevant literature while examining accepted and innovative modes of research methodology.
ACCT 805 Accounting Research Seminar I  
Three Hours: 3 Credits  
This is a foundation level accounting seminar that provides an overview of methodology used in accounting research. Topics include the research process, principles of research design, implementation and evaluation of accounting research. Literature in areas such as accounting experiments, financial market research and agency problem research is reviewed and discussed with a focus on the methodology used.

ACCT 806 Seminar in Selected Accounting Topics  
Three Hours: 3 Credits  
This seminar focuses on research issues in auditing, accounting information systems, accounting education, fund accounting, taxation and other areas of accounting research not covered by other accounting seminars.

ACCT 807 Empirical Research in Capital Markets  
Three Hours: 3 Credits  
This course provides an in-depth examination of accounting and finance related capital markets research. The seminar focuses on current research issues and methods.

FINANCE

FIN 822 Theory of Corporate Finance  
Three Hours: 3 Credits  
This seminar provides an in-depth review of classical and current literature in corporate financial management. Emphasis is placed on the theoretical aspects of the literature.

FIN 823 Seminar in Investment Analysis  
Three Hours: 3 Credits  
This seminar is an integrated study of the major theoretical paradigms underlying modern investment research. Particular attention is paid to current advances in investment theory and applications.

FIN 824 Financial Economics  
Three Hours: 3 Credits  
An examination of the economics theories underlying finance. Topics include basic valuation theory, one-period models and multi-period investments models, capital market equilibrium models; general equilibrium and rational expectation models; asset pricing, money, credit, and liquidity constraints; investment decisions under certainty and uncertainty, and current advances in financial economics.

FIN 825 Applied Econometric Methods  
Three Hours: 3 Credits  
This course examines a variety of quantitative methods that are crucial to understanding analytical methods used in financial research. Emphasis is placed on understanding the theoretical foundations and applications of such quantitative methods.

FIN 826 Empirical Research in Finance  
Three Hours: 3 Credits  
The course focuses on empirical techniques with specific emphasis on current research in the field of finance. Some of the topics discussed will include application of multivariate and nonlinear methods, events-studies, asset prices mean-variance estimation techniques using ARCH, GARCH, etc. and other current estimation methods in finance.

FIN 830 Derivatives Markets  
Three Hours: 3 Credits  
The course examines the theories underlying the analysis and management of derivative securities. Quantitative applications in the field are also examined.
FIN 831  International Finance Seminar  
Three Hours: 3 Credits  
This seminar covers areas of active research in international finance including dynamics of purchasing power parity, foreign exchange market efficiency, exchange rate risks management techniques, theories of trading firms and multinational corporations.

INFORMATION SYSTEMS

INSS 840  Foundation in Information Systems  
Three Hours: 3 Credits  
Explores and discusses the interdisciplinary nature of information systems. Examines the assumptions, concepts, theories, and methodologies that inform research about the behavioral aspects of information systems. Pedagogical issues and techniques are also studied.

INSS 841  Information Systems Strategy  
Three Hours: 3 Credits  
Examines the information systems industry and outlines tools for formulating and evaluating information systems strategy, including an introduction to the economics of technical change, models of technological evolution, and models of organizational dynamics and innovation.

INSS 842  Information Systems Seminar I  
Three Hours: 3 Credits  
Current issues and practices in the strategic management of information technology are analyzed and discussed. Examines different approaches to managing the information systems function within a broad organizational context.

INSS 843  Information Systems Seminar II  
Three Hours: 3 Credits  
Explores and discusses current topics related to information systems. Current topics include, but are not limited to, Electronic Commerce, Data Mining, Data Warehousing, and underlying security issues.

INSS 850  Dynamics of Information Systems in Organizations  
Three Hours: 3 Credits  
This course explores concepts, framework, tools, techniques, and processes that assist management in its interaction with and directions of computer-based information systems organizations. Emphasis on redesigns of information flows to meet the needs of functional areas of organizations.

INSS 851  Knowledge-based Information Systems  
Three Hours: 3 Credits  
Focuses on discussion of knowledge-based tools, techniques, and applications utilizing a significant amount of knowledge about functional business areas. Case studies from a number of business domains are selected for analysis.

INSS 852  Enterprise-wide Infrastructure  
Three Hours: 3 Credits  
Explores critical issues of communication infrastructure among information systems from technical, strategic, and organizational perspective. Network standards, connectivity and flexibility issues are examined in a global context.

INSS 853  Management Databases  
Three Hours: 3 Credits  
Examines the interlocking technological and managerial issues that arise in the operation of distributed systems with emphasis on database technologies. Focuses on analysis and solutions for business problems in a distributed environment.
BUSINESS ADMINISTRATION COURSE DESCRIPTIONS

MANAGEMENT

MGMT 870  Seminar in Human Resource Management
Three Hours: 3 Credits
An examination of selected theoretical and empirical literature describing the management of various activities designed to enhance the effectiveness of an organization's work force.

MGMT 871  Seminar in Business & Society
Three Hours: 3 Credits
A reading seminar treating classic and current readings dealing with interactions between business and its environment, particularly those involving non-economic stakeholders. Includes stakeholder analysis and other approaches to the non-economic tasks of the Chief Executive Officer and other General Managers. Understanding of ethical issues involved is emphasized, including understanding differing ethical systems of analysis and cultural differences. Included are issues in validating research, corporate public affairs management, and other current topics in the field.

MGMT 872  Seminar in Strategic Management
Three Hours: 3 Credits
The seminar covers the major writings in the field of strategic management. Treats quantitative and qualitative approaches to the economic tasks of the Chief Executive Officer and other General Managers, including the integration of all functional portions of organizations. Included are International Strategy, Corporate & Business Unit strategies, and current topics.

MGMT 873  Comparative Management Systems
Three Hours: 3 Credits
This seminar examines management practices and behavior in different countries and geographic areas. Assessment is made of the influence of socio-cultural factors, contextual variables such as size, technology, and market conditions in determining key characteristics of management systems. Emphasis is also placed on analyzing important issues in cross-national and cross-cultural management research.

MGMT 874  International Business Seminar
Three Hours: 3 Credits
This is an intensive survey of the theoretical, conceptual, and empirical literature covering the strategic management of multinational companies. As a survey course it covers the various functional aspects of global business operations at the strategic level. Particular attention is placed on examining the multi-disciplinary nature of the literature in this field of study.

MGMT 875  Special Topics in Management
Three Hours: 3 Credits
This course focuses on areas of current interest in management. Emphasis is placed on an in depth examination of a limited number of issues that are of current interest to management theorists. This allows students to further explore issues in their particular areas of interest in the management field, such as entrepreneurship, corporate governance, strategic human resource management, innovation and organization design.

MGMT 876  Research Implementation
Three Hours: 3 Credits
The goal of this course is to have students identify a topic of interest and develop a publishable empirical research paper. This involves undertaking a full-fledged research process under the guidance of a faculty member over the course of the semester.

MGMT 877  Entrepreneurship Seminar
Three Hours: 3 Credits
This course focuses on classic and cutting-edge entrepreneurship theory and research. Students will explore, in depth, issues related to entrepreneurial opportunity recognition and new venture creation from the psychological, sociological, marketing, and strategic management perspectives. Students are expected to develop a research paper of publishable quality as part of the class.
MARKETING

MKTG 880  Foundations of Marketing
Three Hours: 3 Credits
This course is designed to review and evaluate the classical and contemporary foundation literature of the marketing discipline. It will focus on the definition, domain, and scope of marketing, history of marketing thought, institutional foundations, marketing systems and social processes, and contemporary perspectives.

MKTG 881  Consumer and Organizational Buying Behavior
Three Hours: 3 Credits
This seminar examines the literature to provide a solid foundation for consumer behavior analysis from a cross-disciplinary perspective. Coverage is given to research in psychology, organizational behavior, decision sciences and marketing that relate to various aspects of buyer behavior. Emphasis is placed on critical evaluation of the research, as well as on identifying topics that warrant further exploration.

MKTG 882  Seminar in Strategy and Global Marketing
Three Hours: 3 Credits
This course examines current literature and cutting edge issues in a variety of marketing areas. The approach is based on student exposure to an intensive series of modules as indicated below by the following examples:
Marketing Strategy: This module presents an overview of issues relating to planning, innovation, competitive strategy, and marketing program development.
Global Marketing: This module focuses on the strategic issues associated with marketing in diverse international environments.

MKTG 884  Research Implementation
Three Hours: 3 Credits
This course aims at getting students to develop a publishable article. Emphasis is placed on students identifying an issue of importance and carrying out to a full-fledge research process.

MKTG 890  Social Issues and Public Policy in Marketing
Three Hours: 3 Credits
The course focuses on exploring current issues of interest relating to societal marketing e.g. operations in urban areas, entrepreneurship, retail location decisions, marketing of social programs, consumer behavior of minorities, and ethical aspects of marketing to inner-city populations.

MKTG 891  Special Topics in Marketing
Three Hours: 3 Credits
This course focuses on areas of current interest in marketing, especially as it relates to the marketing mix. Emphasis is placed on examining cutting edge issues and research in the field. It is aimed at helping students gain in-depth knowledge of a particular issue.

MINOR FIELD

BUAD 711  Professional Development Seminar In Business I
Three Hours; 3 Credits
Instructional techniques, procedures, and methods, appropriate for college-level business subjects, and theories underlying them are discussed. Students are encouraged to focus on methods that are particularly useful in their various areas of specialization. Consideration is also given to such issues as goal-setting, selecting instructional methods, measuring learning outcomes, teaching evaluation, and the role of instructional technology.

BUAD 712  Seminar In Case Writing
Three Hours; 3 Credits
This course focuses on the development and use of cases as a tool in business education. Students are expected to develop a preliminary case study as part of the course requirements. Particular attention is paid to techniques used to involve and motivate students for case study learning, and increase their participation in class discussions.
BUSINESS ADMINISTRATION COURSE DESCRIPTIONS

BUAD 713 Professional Development Seminar In Business II
Three Hours; 3 Credits
This is a capstone supervised teaching experience where doctoral candidates are assigned full responsibility for a course under the guidance of a senior faculty member. The course goes beyond the traditional teaching assistant role in that there is close supervision with frequent assessment, evaluation, and feedback over the entire semester.

DISSERATION

BUAD 997 Dissertation Guidance
Three Hours; 3 Credits
Seminar focuses on guiding students to prepare a dissertation proposal under the guidance of a dissertation committee.

BUAD 998 Dissertation Seminar
Six Hours; 6 Credits
Seminar prepares students for completing and defending a dissertation under the guidance of a dissertation committee.

MBA COURSE DESCRIPTIONS

ACCOUNTING

ACCT 500 General Accounting Principles and Concepts
Three Hours; 3 Credits
This course captures the essential aspects of financial accounting. It focuses on accounting procedures for assets, liabilities and stockholders’ equity and the preparation of the income statement, balance sheet and the statement of cash flows.

ACCT 600 Accounting for Decision Making
Three Hours; 3 Credits
This course deals with the three primary functions of business managers: planning, operations and control. The course focuses on cost management methods and practices, financial and management reports, and operational control in a global business environment. Total quality management, benchmarking, continuous improvement, activity-based management, reengineering, the theory of constraints, mass customization, target costing, life-cycle costing and the balance scorecard are covered.

ACCT 603 Financial Statement Analysis
Three Hours; 3 Credits
This course develops an understanding of the balance sheet, income statement and statement of cash flows and how these statements are used by financial professionals. The students will understand the role of these statements in the capital markets. Coverage includes the quality of earnings, initial public offerings, earnings per share, ratio analysis and understanding the footnotes to financial statements.

ACCT 606 Advanced Auditing
Three Hours; 3 Credits
This course covers professional ethics of accountants, accountants’ legal liability, auditing standards, objectives and procedures; audit documentation and auditors’ reports; Sarbanes-Oxley requirements, and standards for reviews, compilations and other assurances services. Internal auditing is also covered.

ACCT 608 Management Information Systems in Accounting
Three Hours; 3 Credits
This course develops an understanding and appreciation for the design, analysis, development, and implementation of computer-based accounting information systems with an emphasis on control and management issues of this accounting function. Practical applications will be examined through computer projects and systems cases. Students are involved in a variety of learning experiences, including problem solving, critical thinking, team participation, oral classroom presentations based on library, and empirical research. Prerequisite: ACCT 500.
ACCT 610  Business Taxation
Three Hours; 3 Credits
This course covers income taxation of businesses by national tax authorities with emphasis on U.S. Federal practices. The impact of advances in technology and tax planning on a global level are examined relative to diverse ethical perspectives. Tax research using current technology will be emphasized.

ACCT 631  Financial Accounting and Reporting
Three Hours; 3 Credits
This is a course on intermediate financial accounting concepts. It examines the core issues included in the conceptual framework of accounting. Accounting and reporting issues related to the various elements of financial statements (i.e. assets, liabilities, equity, revenues and expenses) are covered with emphasis on financial statement presentation and disclosure.

BUSINESS ADMINISTRATION

BUAD 521  Organizational Behaviors and the Environment of Business (Formerly Administrative Theory)
Three Hours; 3 Credits
This course covers organizational theory with specific emphasis on OB theory and research, individual behavior, corporate ethics, international management, group dynamics, motivation, leadership, as well as communications and conflict management. Additional emphasis is placed on the analysis of the relationships between organizations, the international business environment and the different economic, political/legal systems and cultures and their implications for management in an increasingly complex global environment.

BUAD 625  Organizational Leadership and Ethics
Three Hours; 3 Credits
This course focuses on behavioral and ethical issues in organizations and society. Through various experiential learning techniques, the course will address organizational trust, leadership, collaboration, team problem-solving, decision-making and change management.

BUAD 647  International Business Management
Three Hours; 3 Credits
This course captures the subtleties of management of medium and large sized organizations as they respond to an increasingly international marketplace. Areas covered include nuances of managing an international work force; responding to the nuances of multiple cultures in marketing; negotiating in international situations and understanding the role of technology in internationalizing supply chain and outsourcing. Prerequisite: BUAD 521

BUAD 650  Business Research Methods
Three Hours; 3 Credits
Leading companies all have a research function. The function is to help decision-makers sort out dilemmas and search for data that presents the decision maker with options. The course highlights a disciplined way of determining researchable areas and a variety of methodologies to gather data and ideas and carefully translate them into useful information.

BUAD 652  Strategic Human Resource Management
Three Hours; 3 Credits
Human Resource Management represents a key set of processes essential to building, maintaining and rewarding a motivated workforce. Through case study and outside projects, the student will learn the essential insights needed by the manager to insure motivated and capable employees. Prerequisite: BUAD 521.

BUAD 654  Organization Development and Consulting
Three Hours; 3 Credits
This course deals with organizational transformation and application of OD approaches to change. It addresses basic OD intervention techniques, change strategies and effective implementation of OD and OT. Through demonstrations, experiential exercises, cases and readings, the course will provide the student with insights and techniques that add to effective management. Prerequisite: BUAD 521
BUSINESS ADMINISTRATION COURSE DESCRIPTIONS

BUAD 656  Essentials of Negotiation
Three Hours; 3 Credits
Negotiations set the base for contracts, successful project design, successful teams and build a frame of mind that build successful careers. This course focuses on enhancing the student's ability to engage in effective negotiations. Students will consider cases of individuals, intra-organizational, union-management, and business-government negotiations. Prerequisite: BUAD 521

BUAD 658  Current Issues in International Business
Three Hours; 3 Credits
This is a seminar course in which issues of significance are addressed. Topic may include but are not limited to cultures, international trade, technology, communication, area studies, international business ethics, etc. Prerequisite: BUAD 647

BUAD 664  Entrepreneurship
Three Hours; 3 Credits
This course will provide an experiential introduction to the creation of a new business enterprise. The course provides a discussion of entrepreneurship theory and research. The major project is a business plan that could be presented to a venture capitalist, angel investor, bank, or other funding source. Topics of discussion include the traits of successful entrepreneurs, idea generation and opportunity recognition, “window of opportunity,” the venture team, family businesses, management/marketing/financial skills needed, “intrapreneurship.”

BUAD 666  Internship
Three Hours; 3 Credits
This course is designed to provide an opportunity for students to gain significant experiences in leading organizations. Opportunities for internships have to be approved by the Director of the MBA program and meet criteria set by the Office of Career Development.

BUAD 699  Strategic Management
Three Hours; 3 Credits
This course is the forum for integrating the analytic skills drawn from the core areas of the student's MBA study. Cases and simulations will highlight issues and problems designed to utilize financial, technology, behavioral and marketing knowledge. The focus is giving the student cases and projects that build a general manager’s perspective on developing and implementing strategies that focus resources for marketplace success... This course will be in the final semester in the student’s program. Prerequisites: ACCT 600, BUAD 647, FIN 620, INSS 687, MKTG 675

FINANCE

FIN 501  Overview of Economics
Three Hours; 3 Credits
This course is designed to provide necessary foundation of micro, macro, International economics and its applications to the real world issues. Topics to be covered include consumer decision making; firm productions and cost analysis; perfect and imperfect competitive market; unemployment, inflation, and the business cycles; fiscal and monetary policy and their impacts on the economy and businesses; and the flow of international trade and finance within a global economic system

FIN 520  Essential Financial Concepts for Managers
Three Hours; 3 Credits
This course builds the essential concepts fundamental to a managerial orientation. They include risk analysis, valuation, capital budgeting, cost of capital and working capital management. Working within ethical guidelines is highlighted. Prerequisites include ACCT 500, ECON 501

FIN 620  Corporate Finance
Three Hours; 3 Credits
This course focuses on the corporation's need for capital and how this requirement plays out in the management of an organization. There is an emphasis on real world applications of key concepts including valuation and risk, capital budgeting and cost of capital, capital structure, working capital and the impact of reorganization/bankruptcy on the firm. Prerequisite: FIN 520
FIN 630  International Financial Management  
3 hours; 3 credits  
This course explores the financial problems and opportunities faced by multinational firms. The course builds on and extends all the principles provided by domestic corporate finance to account for dimensions unique to international finance. Topics include foreign exchange markets, exposures to exchange rate fluctuations, currency risk management, and multinational corporate investment and financing decisions. Prerequisite: FIN 620.

FIN 631  Financial Institutions and Markets  
Three Hours; 3 Credits  
This course covers the theory of financial intermediation, regulatory environment, interest rates, and asset-liability management with a focus on commercial banking. Prerequisite: FIN 520.

FIN 632  Investment Analysis  
Three Hours; 3 Credits  
This course covers valuation of equities, fixed income securities, and alternative assets, and measurement of risk and return of financial instruments; and diversification of risk within the context of modern portfolio theory. Coverage of securities analysis and portfolio management includes both individual and institutional. Prerequisite: FIN 620.

FIN 633  Risk Analysis and Insurance  
Three Hours; 3 Credits  
This course covers the derivative securities, including options, forwards, futures, swaps and a number of variations of these basic instruments. Topics include the characteristics of these instruments, how they are priced, how they are used in strategies, and how to manage the risk they create as well as how to use them to manage already existing risk: Prerequisites: FIN 620, FIN 632.

MARKETING

MKTG 567  Marketing and the Social Environment (Formerly Marketing Management)  
Three Hours; 3 Credits  
This course combines both the fundamental concepts of marketing goods and services in a competitive marketplace and the increasing complexity of the social environment as it affects the organization and customers. The course is organized around the basic notions of pricing, marketing, advertising and promotion with a strong orientation to social responsibility.

MKTG 675  Advanced Marketing Management  
Three Hours; 3 Credits  
Through the use of cases and projects, this course highlights issues development of and marketing of products and services. The student will obtain a manager’s understanding of brand, marketing, advertising and promotion strategies in both domestic and international markets. Prerequisite: MKT 567

MKTG 676  International Marketing  
Three Hours; 3 Credits  
The emphasis of this course is on emerging trends in international marketing including strategic international alliances and implications of decisions as they relate to ethics and social considerations. A project which encompasses a comprehensive economic, cultural, and competitive analysis of a country and an outline of a marketing plan for it will be required. Prerequisite: MKTG 567

MKTG 677  Promotions Marketing  
Three Hours; 3 Credits  
This course highlights the world of promoting products and services in both net and brick and mortar organizations and expecting marketplace impact. Concepts like goal setting, positioning and segmentation, message strategy and tactics, media strategy and the legal, ethical and global implications of promotions and advertising are involved. The course emphasizes cases and projects. Prerequisite MKTG 675
MKTG 681 Marketing in the Services Organization
Three Hours; 3 Credits
Marketing services is a complex effort by an organization. Through cases, the course analyzes key processes in the delivery of process designed to satisfy customers. Analytical techniques are stressed and applied to a variety of cases and projects in industries like hospitality, health care, tourism, education, and transportation. Prerequisite MKTG 675

INFORMATION SYSTEMS

INSS 540 Fundamentals of Quantitative and Statistical Skills for Managers
Three Hours; 3 Credits
This course provides an understanding of analytical and managerial tools and concepts that are used to help manage important operations functions. It provides a foundation for understanding the operations of a business or manufacturing facility. Students will learn how a company’s technology, facility configuration, processes, trading relationships and management practices enable it to effectively and efficiently serve its markets. The course covers such topics as production and inventory control, scheduling, and quality control. Students will be able to implement various techniques used in operations management based on knowledge of college algebra, statistics and Excel spreadsheet. Prerequisite: INSS 540

INSS 586 Operations Management
Three Hours; 3 Credits
This course highlights the essential skills in mathematics and statistics that are required of the manager. These skills underlie the manager’s ability to make sound decisions and solve complex problems.

INSS 587 Fundamentals of Information Technology for Managers
Three Hours; 3 Credits
This course highlights the importance of the world of information technology in organizations. The focus is providing a base for understanding the fundamental concepts of architecture, information systems, the internet and other technological innovations to the effective structure of supply chains, enterprise management and customer response. The course is centered on the practical understanding and use of the concepts and terminology of technology. This course uses productivity software applications to solve business cases.

INSS 687 Strategic Information Systems
Three Hours; 3 Credits
This course highlights the role of technology as an integrative component in the strategic success of an organization. The course focuses on the key role of Business Process Re-engineering (BPR) in all components of the effective organization’s value chain and in its decision-making capability. The role of the Internet and wireless technologies are fundamental elements. The course examines the role IT plays as a competitive tool than can differentiate a company’s products, services, and processes. Prerequisite: INSS 587.

INSS 691 Project Management
Three Hours; 3 Credits
This course focuses on Project Management (PM) concepts, techniques, and methodologies. For any organization to develop and maintain a competitive edge, it must be able to flawlessly transform ideas into profitable products and services in a cost effective and timely manner. The most efficient vehicle for transforming ideas into successful products and services in a cost effective and timely manner is structures project management. The course provides skills necessary for creating Work Breakdown Structure (WBS) as well as going through other necessary steps to compute project’s estimated duration, cost and resource requirements. The course is based on widely accepted PM standards set forth by PMI.

INSS 692 Knowledge- based and Collaborative Systems in the Organization
Three Hours; 3 Credits
Knowledge management is a key element in many organizations. Explicit knowledge exists throughout an organization and has to be organized with knowledge systems to provide support for decisions and problem-solving and planning. Implicit knowledge is another element in the successful organization that defies ordinary means of organizing. Both are explored. Knowledge-based organizations and ideas like intellectual capital (to compare with financial capital) are hand in hand with the increased collaboration in modern organization. The class explores the richness of these concepts through cases and projects.
INSS 693  Decision Support Systems  
Three Hours; 3 Credits  
In this course, students integrate areas leading to and contributing to management decision making. The course focuses on management's need and uses for decision and expert systems, various management support tools, and implementing management support systems. The course includes contemporary topics in Decision Support Systems (DSSs), Executive Information Systems (EISs), Expert Systems (ES), Neural Networks (ANN), and Groupware. It provides hands-on practice in building and using decision support and expert systems software applications. Prerequisite: INSS 687.

INSS 696  Current Issues in Information Technology  
Three Hours; 3 Credits  
This course provides students with opportunities to learn about the current issues in technological advances in the field of information technology through current readings, discussions and experiences. The content of the course varies from semester to semester based on paradigm shifts in business. Currently topics include Electronic Commerce, Internet and Intranet, EDI, Applications of World Wide Web, etc. Prerequisite: INSS 687.
MISSION

The mission of the Institute of Architecture & Planning (IAP) is to address the social, environmental, physical, economic, and political issues that shape and revitalize urban communities and urban form from an interdisciplinary perspective. IAP offers masters degrees in Architecture, City & Regional Planning, and Landscape Architecture. It also offers an undergraduate degree (BSAED) that is designed to accommodate interest in environmental design and urban planning. Topical explorations bring students into direct contact with the diversity of people who live and work in urban areas. Student and faculty research is framed by such issues and considerations as planning and design theory, community and economic development, environmental sustainability, historic and cultural preservation, information and construction technologies, human behavioral sciences, social equity, environmental justice, professional practice, and leadership roles in the built environment professions.

DESCRIPTION OF THE THREE GRADUATE MASTER’S PROGRAMS

The three professional programs strive to provide national leadership in architecture, landscape architecture, and planning, in particular confronting issues that affect minority and revitalizing communities. Using the greater Baltimore-Washington region as a field of inquiry and practice, students have an excellent opportunity to gain exposure to the issues affecting the evolution and viability of cities worldwide. Course work is enriched by field trips to significant sites in New York City, Philadelphia, Washington, DC, and throughout the Baltimore area. In addition to Institute programs and resources, students enjoy ready access to nationally and internationally significant libraries, lecture series, and art galleries. The rich cultural environment offers access to many of the nation’s and the world’s leading institutions and to leaders in the design and planning professions. All three programs enjoy strong working relationships with professional offices, nonprofit organizations, and government agencies; local and regional practitioners serve as adjunct faculty, guest critics, lecturers, and intern mentors.

The Institute is one of only a small number of programs in the country offering fully accredited first professional degree programs with most design studios and classes available in the evenings. Paid internship opportunities for qualified students are available through the Center for Built Environment Research (CEBER) our practice/research clinic for community design and planning assistance. The institute has made a commitment to the use of computer assisted design and information technology as vital resources in classroom and studio instruction.

ACREDITATION

All three programs offer professional degrees fully accredited by the appropriate national accrediting boards: the architecture program by the National Architectural Accreditation Board (NAAB); the landscape architecture program by the Landscape Architectural Accreditation Board (LAAB); and the planning program by the Planning Accreditation Board (PAB).
MASTER OF ARCHITECTURE (M.ARCH)

Mahendra Parekh, AIA
Associate Professor, Institute of Architecture and Planning
Montebello Complex, B-Wing, Room 102B
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Email: mparekh@morgan.edu

Objective
The Master of Architecture degree program has two primary goals within its mission: to prepare well educated professionals and to provide the context of Baltimore with a graduate program shaped to address the challenges of an urban setting. The program is designed for students who are actively employed in architectural offices during the day and pursuing academic learning at the university during evenings and weekends, which allows students to support themselves while at the same time benefiting from internship experience with local architectural firms. The program addresses urban issues in housing, health care, education, commerce and governance; the activities fundamental to the urban society and its built environment. These issues bring students in contact with the diversity of people who live and work in urban areas. Graduate architectural studies at Morgan are framed by considerations of urban design, city and regional planning, landscape design, historic preservation, information and construction technologies, and the behavioral sciences.

Course offerings include design, history and theory, professional practice, historic preservation, technology, and visual communication: 3D modeling, 3D animation and multimedia prepare the graduate for licensure and leadership roles in architecture profession, as well as for employability in information technology-based professional enterprises. Graduates of the program find meaningful employment in the greater Baltimore area as well as nationally and internationally. Graduates have joined established firms in various forms of private practice. Some have established professional practices and accepted positions in government or teaching.

The first professional degree in Architecture is designed to meet the needs of students with diverse backgrounds

Statement of Accreditation
The Master of Architecture is a fully accredited professional degree program leading to the opportunity for licensure as a professional architect within the United States.

The National Association of Architectural Accrediting Boards requires that the following statement be included, in its entirety, in the catalogues and promotional materials of all accredited programs:

“In the United States, most state registration boards require a degree from an accredited professional degree program as a prerequisite for licensure. The National Architectural Accrediting Board (NAAB), which is the sole agency authorized to accredit United States professional degree programs in architecture, recognizes two types of degrees: the Bachelor of Architecture and the Master of Architecture. A program may be granted a five-year, three-year, or two-year term of accreditation, depending on its degree of conformance with established educational standards.”

Masters degree programs may consist of a pre-professional undergraduate degree and a professional graduate degree, which, when earned sequentially, comprise an accredited professional education. However, the pre-professional degree is not, by itself recognized as an accredited degree.

Advanced Standing and Portfolio Review
Admission and Transfer of Courses
Admission to the program in the initial stages is totally handled through the School of Graduate Studies. All the requirements prescribed in the Graduate Catalogue are to be adhered to before coming to the department review. The department review includes the following:
For non-architectural degree background: evaluating the fulfillment of College Math and Physics requirement, the applicant is advised to arrange to fulfill any deficiency in Math and/or Physics before being able to enroll for Technology courses.
GPA below 3.00: evaluating the grades in major field of studies for conditional admission.
For architecturally based degree: review of academic performance in architectural related courses and review portfolio, both for admission and advanced standing consideration.
Advanced standing is evaluated only after the student has been admitted. The advanced standing is limited to a maximum of 30 credits.

**Portfolio Guidelines**

Every applicant wishing to seek an advanced placement in the 90 credits Master of Architecture program is required to submit a portfolio. The portfolio is a compendium of work that tells the story of personal achievements, interests, skills and development in the area of visual, spatial and constructional abilities. The work should be identified as academic, professional or personal. If professional or team projects are included in the portfolio, the specific contribution of the applicant must be clearly identified. The portfolio must include an array of works that tells the visual story of applicant's personal journey.

**Requirements:**

- Maximum size of eight and a half by eleven inches to contain no more than 10 double sided pages.
- Specific attention should be given to reproduction of high quality, appropriately scaled and sized images
- Labels and writing should be kept to minimum and produced through word processing.
- All three dimensional works shall be photographed for inclusion in the portfolio.
- No slides or CD's are accepted.

**Program of Study**

The Graduate Program in Architecture is well meshed with the mission and goals of our larger institutional setting, that of Morgan State University. Our specific architectural mission is an extension of the fundamental university mission of furthering the education of African American students and others in preparation for professions, and addressing the urban community, through research, education and out-reach programs.

The Master of Architecture I Program is an accredited professional degree that is intended for individuals who have completed a bachelor's degree with a major other than architecture or a closely allied profession. As part of the four semester's series of internship courses, students use this opportunity to seek employment with architectural offices.

On a practical level, the Graduate Program in Architecture is designed as an evening program for the working student. By virtue of being an evening program, our program is financially more accessible than a day program, as students can work for financial support while gaining valuable professional experience. Our program has a strong professional orientation and a highly diverse student population. Our students are actively encouraged to work with architectural firms in the City of Baltimore, following their first one or two semesters in our program.

**General Requirements**

Students in the Master of Architecture Degree Program must complete the required number of credit hours and submit an acceptable terminal design project.

The following distribution of courses over a three-year period represents the sequence to be followed.

*First Year (Fall)*

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ARCH 510</td>
<td>Environmental Design I</td>
<td>6</td>
</tr>
<tr>
<td>ARCH 511</td>
<td>Built Environment History</td>
<td>3</td>
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<tr>
<td>ARCH 513</td>
<td>Architectural Technology I (Statics)</td>
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<td>ENST 512</td>
<td>Graphics Workshop</td>
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*First Year (Spring)*

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<td>ARCH 522</td>
<td>Architectural Technology II (Structures)</td>
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<tr>
<td>ARCH 523</td>
<td>Architectural Technology III (Environmental Controls)</td>
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Second Year (Fall)
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<tr>
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<td>ARCH 531</td>
<td>Built Environment History III</td>
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<td>ARCH 532</td>
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Second Year (Spring)
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<td>ARCH 540</td>
<td>Architectural Design IV</td>
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<td>ARCH 561</td>
<td>Architectural Practice, Law and Management</td>
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Third Year (Fall)
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<tr>
<td>ARCH 550</td>
<td>Architectural Design Studio V</td>
<td>6</td>
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<tr>
<td>ARCH 771</td>
<td>Terminal Design Project Seminar</td>
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<td>URBD 511/512</td>
<td>Elective</td>
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<td>ARCH 772</td>
<td>Architectural Design Studio VI (Terminal Design Project)</td>
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**Total Credit Hours** 90

- Students with Bachelor of Science in Architecture or Bachelor of Architecture (equivalent) can be waived up to the first 30 credits of the program by individual review.

Students with Bachelor of Art in Architecture, Bachelor of Architectural Engineering or Bachelor of Environmental design can be waived up to the first 12 credits of the program, by individual review.
MASTER OF CITY & REGIONAL PLANNING (M.C.R.P)

Siddhartha Sen, Ph.D.
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E-Mail: ssen@morgan.edu

Objective
The City & Regional Planning Program is designed to develop professional planners who will be concerned with the rational organization and distribution of resources within the environment based on an understanding of the social, economic, physical and political forces that interface the structure of neighborhoods, cities and regions. Planners may function as generalists or they may specialize in an area of their choice by pursuing elective courses within the Institute of Architecture & Planning or other related programs throughout the University. The program teaches practical professional applications in an urban setting and focus. The Baltimore region serves as a model for students as they gain expertise in the challenges and opportunities that shape the future of our urban environments. The Program is fully accredited by the Planning Accreditation Board (PAB).

PROGRAM OF STUDY
The following distribution of core courses represents the suggested sequence that should be adhered to by the student:

Core Program (33 credits)
First Year (Fall)
CREP 501 Principles and Practice of City & Regional Planning 3
CREP 513 History of City & Regional Planning 3
CREP 521 Computer Applications for Planners 3
(Sub) Total 9

First Year (Spring)
CREP 510 City & Regional Planning Studio I 3
CREP 511 Quantitative Analysis for Planners 3
CREP 512 Urban Economics 3
(Sub) Total 9

Second Year (Fall)
CREP 520 City & Regional Planning Studio II 3
CREP 532 Municipal Finance and Budgeting 3
(Sub) Total 6

Second Year (Spring)
CREP 522 Land Development Law 3
CREP 539 Housing and Land Development Economics 3
CREP 799 City & Regional Planning Thesis Seminar 3
(Sub) Total 9

Electives (18 credits)
The remaining 18 credits may be taken from courses listed as electives in City & Regional Planning. Other electives may be taken with faculty approval. The electives must supplement and support the program so as to constitute a unified program of study.
Objective
The First Professional Degree Program in Landscape Architecture is a fully accredited, professional program that focuses on the design of the urban environment. Course work investigates aesthetic, ecological, and social/cultural concerns in relation to sustainable urban design, master planning, site design, and environmental management. In this context, the Program is designed to ground students in the basic knowledge, skills, and values fundamental to the profession of Landscape Architecture.

The Graduate Program in Landscape Architecture strives to provide national leadership in confronting issues that affect disadvantaged and revitalizing communities. Using the greater Baltimore-Washington region as a field of inquiry and practice, students have an excellent opportunity to gain exposure to the issues affecting the evolution and viability of cities worldwide. Course work is enriched by field trips to significant sites in New York City, Boston, Philadelphia, Washington, DC, and throughout the Baltimore area. Design studios address issues such as enriching community life in redeveloping neighborhoods, renovating the pedestrian realm, enhancing public spaces, and bringing and/or augmenting nature in the city. Students participate in real community-based projects and field exercises. Recent studio projects include: community revitalization master plans, brownfield redevelopment, greenway designs, community parks and gardens, street improvements, and urban plazas. Students are also exposed to various career avenues through contact with professional offices, public agencies, and community organizations.

The Program is dedicated to maintaining the use of state-of-the-art facilities in information technology. Students and faculty employ a variety of software and 3-D modeling programs, including AutoCAD, Desktop Publishing, and ArcGIS. These programs are used as design tools in conjunction with hand graphic techniques and model building, in order to equip students with the best methods for design exploration and documentation.

The First Professional Degree Program is intended for students who have an undergraduate degree that is NOT a professional degree in Landscape Architecture.

Accreditation
The First Professional Degree Program is a fully accredited program by the Landscape Architecture Accreditation Board (LAAB) of the American Society of Landscape Architecture (ASLA). In the State of Maryland, graduates are eligible after three years of full-time, professionally supervised employment to take the national Landscape Architecture Registration Exam (LARE).

Admissions and Academic Requirements
Two Programs of Study are available:

90-credit Program of Study:
Students who have a bachelor’s degree in ANY MAJOR and are initiating their first studies in a professional landscape architecture degree are eligible to apply to this program. To receive the MLA degree, students must complete all the course work as listed below and submit and defend an acceptable Thesis or Masters Degree Project.

60-credit Program of Study:
Students who hold a four-year college degree in a CLOSELY RELATED DESIGN FIELD (e.g., Architecture, Urban Planning and Design, Environmental Design, Landscape Design) that is comparable to 30 of the 90 credits in the program outlined below are eligible to apply to the 60-credit MLA program of study. Acceptance into this program requires the applicant to submit and receive approval from the Landscape Architecture Faculty for (1) catalog descriptions (and syllabi, if possible) of courses to be considered as equivalent to courses in the program and (2) a design portfolio.
# Program of Study

The schedule listed below is the suggested sequence of study for completing all 90 credits of course work required for the MLA degree within a three-year time frame.

*Note:* Students must satisfy all degree requirements within seven (7) years from the date of admission to the School of Graduate Studies.

## FIRST YEAR (FALL)

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<tr>
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<tr>
<td>ENST 515</td>
<td>Design &amp; Human Behavior</td>
<td>3</td>
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<tr>
<td>LAAR 513</td>
<td>Landscape Resources</td>
<td>6</td>
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<tr>
<td>LAAR 510</td>
<td>Landscape Architecture Studio I: Basic Design</td>
<td>3</td>
</tr>
<tr>
<td>LAAR 511</td>
<td>History of Landscape Architecture</td>
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## FIRST YEAR (SPRING)

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<tr>
<td>LAAR 520</td>
<td>Landscape Architecture Studio II: Site Planning</td>
<td>6</td>
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<tr>
<td>LAAR 522</td>
<td>Technology I: Grading &amp; Drainage</td>
<td>3</td>
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<tr>
<td>LAAR 523</td>
<td>Plant Materials</td>
<td>3</td>
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<td>ENST 770</td>
<td>Computer Aided Design (CAD)</td>
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## SECOND YEAR (FALL)

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<tr>
<td>LAAR 530</td>
<td>Landscape Architecture Studio III: Nature in the City</td>
<td>6</td>
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<tr>
<td>LAAR 532</td>
<td>Technology II: Materials &amp; Methods</td>
<td>3</td>
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<tr>
<td>LAAR 533</td>
<td>Plants in the City</td>
<td>3</td>
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<td>LAAR 525</td>
<td>Geographic Information Systems for Land. Arch.</td>
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## SECOND YEAR (SPRING)

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<tr>
<td>LAAR 540</td>
<td>Landscape Architecture Studio IV: Urban Communities</td>
<td>6</td>
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<tr>
<td>LAAR 542</td>
<td>Technology III: Advanced Site Construction</td>
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<tr>
<td>LAAR 552</td>
<td>Planting Design</td>
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<tr>
<td>LAAR 737</td>
<td>Urban Landscape Design</td>
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## THIRD YEAR (FALL)

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<tr>
<td>LAAR 550</td>
<td>Landscape Architecture Studio V: Urban Landscape Design</td>
<td>6</td>
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<tr>
<td>LAAR 751</td>
<td>Research Methods</td>
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## THIRD YEAR (SPRING)

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<th>Course Title</th>
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<tr>
<td>LAAR 560</td>
<td>Landscape Architecture Studio VI: Master’s Degree Project</td>
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<td>LAAR 789</td>
<td>Supervised Research</td>
<td>3</td>
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<td>LAAR 799</td>
<td>Thesis Seminar</td>
<td>3</td>
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<tr>
<td>LAAR 561</td>
<td>Landscape Architecture Practice</td>
<td>3</td>
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<tr>
<td>Elective</td>
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*Note:* Electives must have approval of the Program Coordinator and supplement and support a unified program of study.
MASTER OF SCIENCE IN LANDSCAPE ARCHITECTURE (M.S.L.A)
(Advanced Professional M.S.L.A. Degree Program)

Objectives
The Program is designed to provide students the opportunity for in-depth investigations into issues of urban landscape architecture and to develop a strong background in design theory, design technology, or computer aided design. This is a three semester, 36 credit program for those who already possess a professional degree in landscape architecture from an accredited university in North America. The program includes Design Studio IV (Urban Communities) and Design Studio V (Urban Design), Urban Landscape Design, Socio-Spatial Patterns of Human Settlement, Research Methods and a research-based Thesis. Students also take three elective courses that must have approval of the Program Coordinator and supplement and support a unified program of study.

Note: The Thesis must meet all of the requirements for completing a thesis as outlined in the School of Graduate Studies Dissertation/Theses Handbook.

The Program is dedicated to maintaining the use of state-of-the-art facilities in information technology. Students and faculty employ a variety of software and 3-D modeling programs, including AutoCAD, ArchiCAD, Desktop Publishing, and ArcView GIS. These programs are used as design tools in conjunction with hand graphic techniques and model building; in order to equip students with the best methods for design exploration and documentation.

Note: To determine if your current professional degree qualifies you for taking the Landscape Architecture Registration Exam (that is, to see whether or not you need a First Professional Degree in Landscape Architecture from a program that is accredited by the American Society of Landscape Architects), you should check for this requirement with the licensing board of the state in which you intend to practice.

Program of Study
The schedule listed below is the suggested sequence of study for completing all 36 credits of course work required for the M.S.L.A. degree within a three-semester period.

Note: Students must satisfy all degree requirements within five (5) years from the date of admission to the School of Graduate Studies.

FIRST YEAR (FALL)
LAAR 510 Landscape Architecture Studio I: Basic Design 6
LAAR 511 History I: History of Landscape Architecture 3
LAAR 513 Landscape Resources 3
ENST 739 Design & Human Behavior 3
(Sub) Total 15

FIRST YEAR (SPRING)
LAAR 520 Landscape Architecture Studio II: Site Planning 6
LAAR 522 Technology I: Grading & Drainage 3
LAAR 523 Plant Materials 3
Elective 3
(Sub) Total 15

SECOND YEAR (FALL)
LAAR 530 Landscape Architecture Studio III: Nature in the City 6
LAAR 532 Technology II: Materials & Methods 3
LAAR 533 Plants in the City 3
ENST 770 Computer-Aided Design (CAD) 3
(Sub) Total 15
### SECOND YEAR (SPRING)
- LAAR 525 Geographic Information Systems (GIS) for Landscape Architects 3
- LAAR 540 Landscape Architecture Studio IV: Urban Communities 6
- LAAR 551 History II: Contemporary Urban Landscape Design 3
- LAAR 552 Planting Design 3
  
  **(Sub) Total** 15

### THIRD YEAR (FALL)
- LAAR 541 Technology III: Advanced Site Construction 3
- LAAR 550 Landscape Architecture Studio V: Urban Design 6
- LAAR 751 Research Methods 3
- Elective 3
  
  **(Sub) Total** 15

### THIRD YEAR (SPRING)

*Student must select Master’s Project Option (I) or Master’s Thesis Option (II)*

#### Option I: Master’s Project Option
- LAAR 560 Landscape Architecture Studio VI: Master’s Degree Project 6

or or

#### Option II: Master’s Thesis Option
- LAAR 789 Supervised Research 3
- LAAR 799 Thesis Seminar 3
- LAAR 561 Landscape Architecture Practice 3
- Elective 3
- Elective 3
  
  **(Sub) Total** 15

**Note:** All electives must have approval of the Program Coordinator and supplement and support a unified program of study.
INSTITUTE OF ARCHITECTURE & PLANNING COURSE DESCRIPTIONS

ARCHITECTURE

ARCH 510  Environmental Design I
Twelve Hours: 6 Credits
This studio is an introduction to the vocabulary and tools of the built environment professional through an interdisciplinary studio for all first year architecture students. The course is designed to move students from an initial view of their personal values and environment to a more expansive view of values and environments of others. Students will also be introduced to contemporary trends of the built environment professions, basic problem solving and visual communication skills. Using Baltimore as a laboratory, students will analyze through drawings, models and diagrams, the interrelated complexities of forms, spaces and structures of the city. Prerequisite: Admission to program.

ARCH 511  Built Environment History I
Three Hours: 3 Credits
An introduction to the historic foundations of built form, including settlement patterns and indigenous building types. Beginning with Egyptian architecture and continuing to the philosophical start of the Renaissance, this course is a foundation in the history and theory of architecture, that develops an understanding of the close relationship between social forces and the forms of architecture. Prerequisite: Admission to program.

ARCH 513  Technology I (Statics and Strength of Materials)
Three Hours: 3 Credits
This course is devoted to the development and application of the principles of static mechanics and strength of materials as they relate to the analysis of building structures. Prerequisites of physics and mathematics through college algebra are required. Prerequisite: Admission to program.

ARCH 520  Architectural Design Studio II
Twelve Hours: 6 Credits
The architecture students are introduced to a familiar environmental package of the home and adjacent landscape. The intention of the course is to teach students to design residences and communities based on an understanding of the form and structures of urban home and community prototypes. Emphasis will be placed on developing design criteria through the analysis of conditions, needs, aspirations and resources of the resident's-environment. Attention will be given to the role of the residential neighborhoods in the city by understanding the elements that produce the satisfying urban home and residential community. Prerequisite: ARCH 510.

ARCH 521  Built Environment History II
Three Hours: 3 Credits
Building on the concepts of ARCH 511 Built Environment History I, this course is an introduction to architectural and urban design history from 1500 to 1900, with an emphasis on world architecture and the significance of multicultural architectural traditions. The development of specific built form topologies is studied, including patron residential, religious, civic structures, and urban space. Emphasis will be placed on two specific areas. The first is to identify significant architects, their theories and buildings; the second is to look at how cities evolved, adapting to new uses and styles of habitation. Prerequisite: ARCH 511.

ARCH 522  Architectural Technology II (Building Systems-Structures)
Three Hours: 3 Credits
The purposes of this course are (1) to develop the student's skills and techniques in the design of basic elements of various wood and steel structural systems; (2) to expand their understanding of the principles and characteristics of various structural materials; and (3) to enhance his/her ability to resolve structural problems of cost, durability, space, legal restrictions, time and aesthetics. Prerequisite: ARCH 513.
ARCH 523  Architectural Technology III (Environmental Controls)
Three Hours: 3 Credits
The purposes of this course are to expand the students' understanding of the nature and characteristics of various environmental systems as well as to develop their ability to make choices between systems that best resolve the problems of cost, social accommodation, operating efficiency, durability, scheduling, safety, and aesthetics. Prerequisite: ARCH 510.

ARCH 530  Architectural Design Studio III
Twelve Hours: 6 Credits
As a continuing study of an urban neighborhood, students will be introduced to commercial and/or institutional forms and their contexts. Students will explore various issues related to the programming, planning and designing of various types of commercial and institutional establishments. Emphasis will be placed on the requirements, analyzing various environmental concerns, planning considerations and jointly developing design solutions that address architectural and landscape architectural requirements. The course will be organized into a sequence of design problems. Prerequisite: ARCH 520.

ARCH 531  Built Environment History III
Three Hours: 3 Credits
This course covers the philosophy of modern architecture since 1910, the building styles and works by masters of modern architecture after World War II, and introduces the graduate student to divergent architectural theories that began with post-modern architecture. Emphasis is placed on individual research projects and presentations by students on a particular theory of architecture or by a particular architect during the contemporary era. Prerequisite: ARCH 521.

ARCH 532  Architectural Technology IV (Building Systems-Structures)
Three Hours: 3 Credits
This course is a continuation of Architectural Technology III and is designed to (1) develop students' skills and techniques in the design of basic elements of various concrete structural systems; (2) expand their understanding of the principles and characteristics of various structural materials; and (3) enhance their ability to resolve structural problems of cost, durability, space, legal restrictions, time and aesthetics. Prerequisite: ARCH 522.

ARCH 533  Architectural Technology V (Building Materials)
Three Hours: 3 Credits
In this course, students learn to evaluate selected sets of building materials. Additionally, students will be required to apply their analytical skills to the selections of materials for a selected project. Emphasis will be given to the relationship between design and construction. Although the analytical process to be taught can be universally applied in material selections, the focus will be on those materials and techniques commonly used in the Central Atlantic Region of the United States. The principles of specification writing and existing CSI standards are introduced and applied on specific assignments. Prerequisite: ARCH 523.

ARCH 540  Architectural Design Studio IV
Twelve Hours: 6 Credits
The intent of this studio is to explore design approaches to multi-use public facilities. Assignments and design problems will require the students to use their experiences in data collection and analysis in developing design approaches for multi-use facilities. Problem statements will be developed in concert with current needs of selected municipalities. Specific emphasis will be placed on having the students develop extensive sets of presentation documents outlining structural, environmental and spatial character of the built form(s) they create. Prerequisite: ARCH 530.

ARCH 541  Architectural Technology IV (Production Techniques)
Three Hours: 3 Credits
The main thrusts of this course are intended to acquaint the students with the principles of communicating building construction. The course will focus on an overview of how the major components of a building fit together, the rationales behind their construction, and the methods of graphically describing these concepts. Further, the course work, lectures, and laboratory experiences are intended to present as clearly as possible the implications of the choice of a particular communication tool. Specification writing is applied on assigned segments. Prerequisite: ARCH 533.
ARCH 550  Architectural Design Studio V
Twelve Hours: 6 Credits
This studio will deal with larger-scale development in the Baltimore metropolitan region. The projects will address the many facets of urban residential development, including financial, social and environmental concerns. Proposed criteria for development, land use, programming and physical built form will be dealt with on a site-specific basis. It is the intention that the site and the context of the problem force the designer to consider mixed, residential and commercial uses. The quality and standard of physical design synthesis will play a major role in determining the ultimate viability for future development. Prerequisite: ARCH 540. Co-requisite or prerequisite: ARCH 531.

ARCH 561  Architectural Practices, Law and Management
Three Hours: 3 Credits
The objective of this course is to explore the roles, relationships, and legal responsibilities of an architect. The architect’s professional interaction with consultants, owners, contractors and the various governmental authorities that regulate the building industry will be discussed. The fundamentals of professional practice and ethics, as well as various management tools will also be explored. Prerequisite: ARCH 540.

ARCH 771  Terminal Project Seminar
Three Hours: 3 Credits
The seminar will include discussions of trends in contemporary professional design. The primary intent of this effort is to assist the student’s selection of a direction for the final semester terminal thesis. A secondary objective is to compel the student to develop a design program, based on research and evaluation, for his/her terminal design in the final semester. Prerequisite: ARCH 531 and 540.

ARCH 772  Architectural Design Studio VI-Terminal Project
Twelve Hours: 6 Credits
Prerequisite: ARCH 550; Prerequisite or co-requisite ARCH 541 Tech VI.

This studio involves the conception, development and design of a comprehensive thesis project programmed in ARCH 799.185. Lectures, seminars and outside assignments as required.

ARCH 797  Thesis Guidance
Two Hours: 2 Credits

ARCH 799  Thesis Seminar
Three Hours: 3 Credits
CITY & REGIONAL PLANNING

CREP 501 Principles and Practices of City & Regional Planning
Three Hours: 3 Credits
This is a required introductory planning course designed to expose students to the principles, practices, and theory of City and Regional Planning. The course is an overview of planning theory and practice in the United States. The course integrates contemporary theory and practice from a historic perspective so that the students will learn why the planning profession evolved and how it has changed in the United States over the recent past. They are then expected to extend this knowledge to Baltimore. The course incorporates issues of ethics and diversity as they relate to planning theory, practice, and education.

CREP 502 Graphics and Geographic Information Systems for Planners
Three Hours: 3 Credits
This course is designed for the student who has had little or no experience in graphics, mapping techniques and basic application of geographic information systems in planning practice. Course content will familiarize students with methods of mapping techniques, and spatial analysis using the tools of geographic information systems.

CREP 506 Urban Land Use for Planners
Three Hours: 3 Credits
A geographical analysis of the evolution, form, and function of the internal structure of the American city. Analyzes comprehensive, environmental, and infrastructure planning in the context of societal, governmental and technological trends including geographic information systems. Incorporates planning theory and practice in describing the competition over community's future land use pattern.

CREP 510 City & Regional Planning Studio I
Three Hours: 3 Credits
This course allows students to utilize methods and techniques of basic data collection, synthesis, and analysis in the process of formulating development plans and programs. The primary objective of the studio is to expose each individual to the comprehensive and neighborhood planning process.

CREP 511 Quantitative Analysis for Planners
Three Hours: 3 Credits
The course teaches students to use quantitative methods of reasoning to solve problems they may encounter as urban planners, and present their conclusions in a clear and logical manner. They also acquire "hands-on" experience in using computer softwares such as SPSS as a tool for quantitative data analysis. They learn how to interpret and present statistical results, and apply them to practical solutions, such as evaluating policies, or making policy recommendations.

CREP 512 Urban Economics
Three Hours: 3 Credits
The course acquaints students with the basic concepts in urban economics and their application to urban planning and public policy questions. The course also examines some current urban issues from an economic perspective.

CREP 513 History of City & Regional Planning
Three Hours: 3 Credits
The course looks at the history of city and regional planning in the United States through the contributions of specific individuals and events that helped shape the profession. Students examine the major principles, events, outcomes, and design elements, among others, of development periods in planning history. The historical context for each period as well as significant outcomes, and applications are addressed. The course also examines certain spatial, cultural, and political factors, issues, and conditions associated with the history of the city and regional planning profession in the United States.
CREP 514  Principles of Urban Design I (Urban Form)
Three Hours: 3 Credits
Part 1, Urban Form, deals with the origins of public policy as it has evolved from issues in spatial structure. Attention, through careful illustration, is directed towards the components of urban form and who manages them, what they manage, and how they manage segments of the built environment. The course objectives are to recognize urban design as the discipline that integrates physical design with the power of policy making to shape the large-scale public/private environment.

CREP 515  Principles of Urban Design II (Implementation)
Three Hours: 3 Credits
The course provides an understanding of the implementation process of an urban design project. Students develop parameters and principles of urban design, which can be executed within public sector initiatives, and policies, and regulations that influence the quality of the built environment. Students learn how to translate such issues into a community urban design plan.

CREP 520  City & Regional Planning Studio II
Three Hours: 3 Credits
This course provides an advanced, team-oriented planning project assignment to be addressed in a realistic fashion with faculty support and guidance and usually with "client" interaction with an agency and/or community groups.

CREP 521  Computer Applications for Planners
Three Hours: 3 Credits
The course provides students with a sound understanding of basic microcomputer hardware structure, operating systems, and software application packages currently used in planning agencies. More important, it provides an opportunity to learn how to use these packages to solve real world planning problems. The student is introduced to spreadsheets, database management, computer mapping, chart making, geographic information systems, and statistical analysis.

CREP 522  Land Development Law
Three Hours: 3 Credits
The course is designed to add specialized information to the student's general understanding of the land development process in the field of planning. The course provides students with an awareness of the legal aspects of planning and how the legal organization and system effects planning. Attention focuses on the major legal principles, which apply to public and private use of the physical environment, and especially the land development process. Students also become acquainted with the legal framework, legislative and administrative processes regarding public response, review, and input on development rules and regulations.

CREP 524  Public Facilities Planning
Three Hours: 3 Credits
This course will investigate the factors contributing to alternative locations for activities/facilities as determined by transportation, land use patterns, performance standards, etc. The economics, spatial context, and patterns of location of public facilities will be considered.

CREP 526  Urban Transportation Planning
Three Hours: 3 Credits
This course explores the various issues in urban transportation. The transportation planning process will be analyzed through the use of major transportation studies. This will include data collection, problem analysis, plan foundation, evaluation, and implementation.

CREP 532  Municipal Finance and Budgeting
Three Hours: 3 Credits
Students seek to examine the theories of municipal financing as they interface with urban planning. Particular emphasis is given to federal, state and municipal services and methods of evaluating municipal effectiveness.
CREP 533  Planning Administration and Management  
Three Hours: 3 Credits  
Theories of planning process are compared with concepts of organizational structures, functions, and processes. National, state, regional, city neighborhood, and corporate structures will be examined.

CREP 534  Public Policy Analysis  
Three Hours: 3 Credits  
Techniques useful in data collection, problem analysis, client analysis, impact analysis, program evaluation, systems analysis, etc. are covered. Each student is asked to make application to real programs or issues of public importance.

CREP 537  Program Development and Implementation  
Three Hours: 3 Credits  
Students use case study situations to deal with the realities of urban planning practice. Research and program proposals, specific sets of programs, studies of marketing feasibility and social needs will be examined.

CREP 539  Housing and Land Development  
Three Hours: 3 Credits  
The intent of this course is to examine the land development process and the impact of economic forces upon those who develop land as well as those who seek to protect it and control urban growth. Economic theories, land use planning concepts and elements of the development process will be explored.

CREP 542  Environmental Planning  
Three Hours: 3 Credits  
This course surveys the current and potential issues surrounding urban and regional development activity on the natural environment.

CREP 546  Environmental Evaluation Techniques for Land Planning  
Three Hours: 3 Credits  
This course exposes the student to the use of various physical maps, aerial photographs, including a range of other geographic information systems to undertake land suitability analysis for land use planning.

CREP 550  Regional Scale Planning-Land Planning Studio  
Six Hours: 6 Credits  
This studio will deal with large-scale regional development in the Baltimore metropolitan region. The course will address the many facets of city and regional development including financial, social, and environmental concerns. Proposals of criteria for development, land use programming and physical built form will be dealt with on an area-wide basis.

CREP 552  Site Planning for Planners  
Three Hours: 3 Credits  
This course introduces planners to the principles and practices of site planning. The course will cover site analysis, layout of major site features (buildings, roads, parking areas, ecology, etc.); and design of outdoor spaces for pedestrian use.

CREP 553  Landscape Resources for Planners  
Three Hours: 3 Credits  
Basic principles governing ecosystems will be studied to understand the role of natural factors as determinants of land use. Planning devices for resource protection, conservation, management and development will be examined. The aim is to develop a responsibility with the student to protect our landscape resources, and to appreciate the influence physical features have on man-made environments.
CREP 560  City & Regional Planning: Land Planning Workshop  
Six Hours: 6 Credits  
This workshop will introduce students to land planning and community design. Projects undertaken will be those having impacts reaching far beyond site boundaries. The student will develop programming, planning and design for large or complex sites taking into account natural and cultural features, market and economic conditions, user needs, and public policy. Strategies for project implementation, phasing, and maintenance will be addressed.

CREP 714  BES Internship for Planners  
Three Hours: 3 Credits  
This seminar is designed to accommodate students involved in various work-study relationships in different agencies and community organizations. The course will discuss and analyze the diverse experiences of the students within the framework of the professional built environment process.

CREP 788-789 Supervised Research for Planners  
Three Hours: 3 Credits  
These courses are designed to enable students to participate in research areas of their competence under the supervision of faculty. Students are required to submit research findings orally in a seminar and to submit a written research proposal and report to the graduate faculty.

CREP 797  Thesis Guidance  
Two Hours: 2 Credits  
Thesis guidance provides students who have not completed their thesis in the assigned semester, a mechanism for continuing their work under faculty supervision. Prerequisite: Permission of the Program Coordinator

CREP 799  Thesis Seminar In City & Regional Planning  
Three Hours: 3 Credits  
The student applies selected planning concepts and methods to an important substantive area and conducts research under careful supervision.
ENVIRONMENTAL STUDIES

ENST 512 Graphics Workshop
Four Hours: 3 Credits
Graphics Workshop is an interdisciplinary course taken jointly by students in the Architecture and Landscape Architecture programs. The purpose of this course is to develop students’ skills and techniques in visual communications, thus allowing them to select and apply the most appropriate means of graphically presenting problems and/or solutions. Students are also exposed to techniques and skills that aid in perceiving forms in three dimensions—a necessary ingredient for design creativity. Prerequisites: None.

ENST 515 Socio-Spatial Patterns of Human Settlement
Three Hours: 3 Credits
The moral necessity of providing people an urban environment in which to flourish is studied in relation to the physical, institutional, and cultural environment. The role and functions of planning and design are examined for their critical contributions and limitations in accommodating an enriching urban life. Prerequisites: ENST 515 or permission of the LAAR Program Coordinator.

ENST 542 Advanced Communications (3-D Modeling)
Four Hours: 3 Credits
As a continuation of ENST 512 - Graphics Workshop, this course introduces 3D geometric modeling and rendering as techniques to conceive, analyze, visualize, and simulate forms. The course provides both a theoretical introduction to 3D-geometric modeling and an opportunity to develop skills in application through intensive practical work. Through a series of short design projects, students will learn to model and explore design ideas using — whenever appropriate — a variety of CADD, modeling and rendering applications such as: AutoCAD, Archicad, form-Z, and 3D studio Max. Prerequisites: ENST 512, or permission of the instructor.

ENST 573 Principles of Site Planning
Three Hours: 3 Credits
The course introduces architects and planners to the principles and practices of site planning. The course covers site analysis, layout of major site features (buildings, roads, parking areas, etc.), and the design of outdoor spaces for pedestrian use. Prerequisites: Permission of the instructor and the Program Coordinator.

ENST 601 Historic & Cultural Preservation
Three Hours: 3 Credits
This course introduces the principles and practices of historic and cultural preservation, across the spectrum of the three environmental design disciplines of architecture, landscape architecture, and planning, with a special emphasis on African American historic and cultural preservation activities and resources. Prerequisite: Permission of the instructor.

ENST 714 Built Environment Internship I
Nine Hours: 3 Credits
This course is designed to accommodate students involved in various work-study relationships in different agencies and community organizations. Working under the supervision of an office professional, the course will document and evaluate the diverse experiences of the students within the framework of the practice or agency. Prerequisites: Permission of the respective Program Coordinator.

ENST 715 Built Environment Internship II
Nine Hours: 3 Credits

ENST 716 Built Environment Internship III
Nine Hours: 3 Credits
ENST 717  Built Environment Internship IV  
Nine Hours: 3 Credits

ENST 738  Seminars in Built Environment Studies  
Three Hours: 3 Credits  
This course is designed to examine, in greater depth, particular subject areas of the built environment, i.e., Theories of Architecture, Behavior and the Built Environment, Ecology and Design, Design Theory and Criticism, Culture and Design, Open Space Planning and Design, Photography of the Built Environment. Prerequisites: Permission of the Instructor and the respective Program Coordinator.

ENST 739  Design & Human Behavior  
Three Hours: 3 Credits  
An introduction to a range of viewpoints, concepts, and characteristics of human behavior that should be taken into consideration when designing the environment. Cultural, social, and psychological factors will be considered. Various theories and methods of environmental assessment and design will be studied that are based on an understanding of mutually supportive relationships between people and their physical environment. Prerequisites: None.

ENST 770  Computer Aided Design I (CAD/PhotoShop/etc.)  
Four Hours: 3 Credits  
An introduction to Computer Aided Design (CAD), Imaging and Desktop Publishing. Students will learn how to use computers for drawing plans, sections, and elevations. Once two-dimensional drawings are completed, they will be imported into Imaging software applications like Adobe Photoshop for rendering and shadow casting. Desktop Publishing software applications like Adobe PageMaker will also be introduced for creating marketing, promotional and design presentation documents.

ENST 771  Computer Aided Design II (3-D Animation)  
Four Hours: 3 Credits  
An introduction to Desktop Publishing and Geographic Information Systems (GIS) [this course number had been used for LAAR's GIS course—now changed to LAAR 525] as well as advanced Computer-Aided-Design (CAD). Students develop basic computer skills that are commonly utilized in projects assigned in the Landscape Architecture Program. Prerequisites: ENST 770, or permission of the Instructor.

ENST 788-789  Supervised Research  
Three Hours: 3 Credits, each course  
These courses are designed to enable students to participate in research areas of their competence under the supervision of faculty. Students are required to submit research findings verbally and to submit a written report to the graduate faculty. Prerequisites: The submission of a well organized, focused, operational research proposal and permission of the respective Program Coordinator.
LANDSCAPE ARCHITECTURE

LAAR 510    Landscape Architecture Studio I: Basic Design
Ten Hours: 6 Credits
An introduction to the vocabulary and principles of basic design related to landscape architecture. Students are assigned specific exercises that apply these principles in various combinations to simple problems in landscape design. Study focuses on the interrelated complexities involved with experiencing form, space, and site. Prerequisites: Admission to program or permission of the Program Coordinator.

LAAR 511    History I: of Landscape Architecture
Three Hours: 3 Credits
A survey of historic traditions in landscape design that have a continuing influence in contemporary landscape architecture. Important works commonly used as references in the profession are studied for their spatial organization, landscape character and contextual relationships. Emphasis is placed on social, cultural, artistic, political and technological forces that influence the design of built landscapes in different time periods and geographic locations. Prerequisites: None.

LAAR 513    Landscape Resources
Three Hours: 3 Credits
An introduction to natural systems analysis for land use suitability and basic principles governing ecosystems. The role of natural factors as guiding determinants of urban land development is studied. Ecologically based planning methodology and techniques for resources preservation, reclamation, management and development are examined. The aim is to instill the sense of stewardship toward the landscape as a basis for urban landscape planning and design. This course is cross-listed with CREP 542. Prerequisites: Graduate standing or permission of the Program Coordinator.

LAAR 520    Landscape Architecture Studio II: Site Planning and Design
Ten Hours: 6 Credits
An introduction to site analysis and site design. Emphasis is placed on analysis, representation and design of site specific landscapes within the urban context and social environment. Prerequisites: LAAR 510 and LAAR 513, or permission of the Program Coordinator.

LAAR 522    Technology I: Grading & Drainage
Four Hours: 3 Credits
The study of shaping of the earth’s surface in an ecological, technical and aesthetic manner with an emphasis on the technical ability to transform design ideas into physical reality. Specific topics include contours and slope analysis, the grading process, earthwork, and storm runoff analysis. Prerequisites: LAAR 510 and LAAR 513, or permission of the Program Coordinator.

LAAR 523    Plant Materials
Three Hours: 3 Credits
An introduction to plant materials in terms of their botanical identification, design characteristics and ecological requirements. Trees, shrubs, vines, and ground covers commonly used in urban planting design are emphasized. Prerequisites: None.

LAAR 525    GIS for Landscape Architects
Four Hours: 3 Credits
An introduction to Geographic Information Systems and its specific application to the landscape architecture profession. Topics include: spatial modeling, visual analysis, resource management, site design, master planning, and public advocacy. Prerequisites: None.
LAAR 530  Landscape Architecture Studio III: Nature in the City  
Ten Hours: 6 Credits  
This course addresses how nature can be integrated into the urban fabric through the design of greenways, urban forests, city and neighborhood parks, street tree plantings, green plazas, and community gardens. Emphasis is placed on such environmental values as contact with nature, sustainable landscapes, climatic comfort, and environmental health. These concerns are studied in relation to land use patterns, site context, and the socio-cultural values of city users. Prerequisites: LAAR 520, or permission of the Program Coordinator.

LAAR 532  Technology II: Materials & Methods of Construction  
Four Hours: 3 Credits  
This course covers the basic materials and methods of landscape architecture site construction with an emphasis on sustainable materials and construction methodologies. Specific topics include construction details for paving, curbs, edgings, steps and ramps; construction details for freestanding walls and fences and retaining walls; deck, pergola, bridge construction; structural loads, and ponds, pools and fountain construction details. Prerequisites: ENST 770 and LAAR 522, or permission of the Program Coordinator.

LAAR 533  Plants in the City  
Three Hours: 3 Credits  
An urban study of plants from morphologic and physiologic adaptations in the environment to soil structure, nutrient chemistry and contaminant loading. Students study ecological needs and planting practices as well as the design benefits of plants in the urban environment. The class looks at typical urban street conditions, urban wetlands, brown-fields and city parks as areas of unique plant requirements. Prerequisites: LAAR 523, or permission of the Program Coordinator.

LAAR 540  Landscape Architecture Studio IV: Urban Communities  
Ten Hours: 6 Credits  
This studio is focused on community design with the physical environment viewed as a catalyst for community enhancement and revitalization. Typical issues of concern include community identity, social cohesiveness, the role of open space in urban neighborhoods, and community safety and livability. The urban context and the pedestrian realm are used as the point of departure for designing public spaces and community places. Studies are aimed at accommodating the everyday life of local residents and users while recognizing the indigenous context of the built environment and the socio-behavioral characteristics of the inhabitants and their cultural heritage as formative influences during the design process. Prerequisites: LAAR 530, or permission of the Program Coordinator.

LAAR 541  Technology III: Advanced Site Construction  
Four Hours: 3 Credits  
This is the capstone course of the technology series. Specific topics include: road alignment, and site demolition and layout. The major emphasis of the course, however, is the preparation of a complete set of technical construction documents with specifications and cost estimates. Prerequisites: LAAR 522 and LAAR 532, or permission of the Program Coordinator.

LAAR 550  Landscape Architecture Studio V: Urban Design  
Ten Hours: 6 Credits  
This studio addresses issues related to the planning and design of the urban landscape. Studies focus on advancing skills in land development, programming, master planning, and site design of urban projects. Emphasis is placed on enhancing urban aesthetics, the quality of the pedestrian realm and the design of public spaces within site-specific contexts. The socioeconomic and cultural aspects of design and planning are also addressed. Prerequisites: LAAR 540, or permission of the Program Coordinator.
LAAR 551  20th Century History and Theory of Landscape Design
Three Hours: 3 Credits
This course is an historical investigation of the development of landscape architecture and urban design in the twentieth century. Emphasis is placed on the rise of modernism in architecture and landscape architecture, the ecological critique of modernism, emerging theories of landscape design, and twentieth century urban design and theory. Prerequisites: None

LAAR 552  Planting Design
Three Hours: 3 Credits
In this course, students study the use of plants as a major site design factor. The course presents the uses of botanic elements to develop spatial definition and character and its relationship to architectural form and order. Plants are also studied for their uniqueness as a design element, color composition, form and order. Course compositions look at rhythm, order, form texture, color and balance as an expression of a landscape medium. Prerequisites: LAAR 520, LAAR 523, or permission of the Program Coordinator.

LAAR 560  Studio VI: Master’s Degree Project
Six Hours: 6 Credits
Students investigate a topic of their own choosing through a site specific design project. Emphasis is on the framing of the problem, building on relevant literature and precedents and articulating a position and explanation of how the project addresses the critical issues of the site and problem. Prerequisites: LAAR 751, completion of the entire design studio sequence, (LAAR 510-550).

LAAR 561  Landscape Architectural Practice
Three Hours: 3 Credits
Students examine the role of the landscape architect in a variety of work environments such as private practice, government practice, education and related industries. Study includes the legal, ethical, and contractual responsibilities of landscape architectural practice and basic procedures, management and information systems used in professional offices. Prerequisites: Must be in the final year of the MLA program, or permission of the Program Coordinator.

LAAR 562  Urban Stream Restoration
Three Hours: 3 Credits
This course introduces students to stream restoration techniques. Topics covered include: river mechanics, stream classification systems, stream morphology, and hydraulic geometry relationships. Students learn how to use stream measurement techniques, develop and construct stream protection and restoration strategies, and conduct post-construction monitoring. Prerequisites: LAAR 522, or permission of the Program Coordinator.

LAAR 572  Urban Hydrology
Three Hours: 3 Credits
This is an advanced course for students wanting to become proficient in hydrologic applications, particularly those used in urbanized areas. Topics covered include Maryland’s storm water Management Regulations, storm water runoff calculations, storm drain design, and state-of-the-art best management practices. Prerequisites: LAAR 522, or permission of the Program Coordinator.

LAAR 751  Research Methods
Three Hours: 3 Credits
This course provides an overview of research methods commonly used in landscape architecture focused on the development of each student's individual scholarship either a thesis or a master’s degree terminal project. Emphasis is placed on the articulation of a research “problem” and the development of that problem into an appropriate project, approach, and time frame for investigating it. Prerequisites: Must be in final year of the MLA program, or permission of the Program Coordinator.
LAAR 788-789  Supervised Research
Three Hours: 3 Credits
These courses are designed to enable students to participate in research areas of their competence under the supervision of faculty. Students are required to submit research findings verbally and to submit a written report to the graduate faculty. Prerequisites: The submission of a well organized, focused, operational research proposal and permission of the Program Coordinator.

LAAR 797  Thesis Guidance
Two Hours: 2 Credits
Thesis guidance (for the LAAR.799 option only) provides students, who have not completed their thesis in the assigned semester, a mechanism for continuing their work under faculty supervision. Prerequisites: Permission of the Thesis Advisor or Program Coordinator.

There are two final options for students pursuing the MLA degree: the “Master’s Degree Project” or the “Thesis Seminar.” (Students, after consultation with the Program Coordinator, will decide which of the two options they will complete)

LAAR 799  Thesis Seminar
Three Hours: 3 Credits
Students are expected to demonstrate leading professional knowledge through rigorous thesis research. A research based thesis is for students having an interest in a topic relevant to landscape architecture history/culture, theory, design, construction, or practice; the presentation format is a written text with supporting graphics as appropriate. The thesis option must meet all of the requirements for completing a thesis as outlined in the School of Graduate Studies Dissertation/Theses Handbook. This option is required for students pursuing the MSLA degree. Prerequisites: Completion of the entire studio sequence, or permission of the Program Coordinator.
DOCTOR OF PUBLIC HEALTH (DrPH)

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Objective
The Doctor of Public Health degree program provides its students with problem solving, analytical, program planning, communication, research, and cultural sensitivity skills as well as competencies in the development and implementation of health promotion and disease prevention programs for community health behavioral change. The program, which educates public health practitioners to address and solve contemporary health problems of urban populations, is also committed to increasing and validating the body of knowledge required for public health research and practice.

Admission to the Program
For unconditional admission, applicants must have earned a bachelor and/or masters degree from an accredited college or university with a minimum academic grade point average (GPA) of 3.0 or above on previous baccalaureate or masters degree course work Admission to the Doctor of School of Public Health and Policy is granted for only the fall semester and is based on the following requirements:

• Three Letters of Recommendations from practicing public health professionals and/or other professionals or academicians.
• Career objectives as outlined in an entrance essay to be completed by the applicant.
• Documentation of previous academic achievement, professional accomplishments, and earned degrees.
• Results obtained on the Graduate Record Examination (sent directly from Education Testing Service (ETS). Test scores may not be more than five (5) years old prior to date of application.
• At least two (2) years of work-related experience in public health/ allied health field is preferred.
• Interview with the doctoral program admissions committee (in person if possible).

General Requirements for the Doctor of Public Health Degree
All students who seek to earn the Doctor of Public Health degree will be required to complete the following requirements, including a dissertation for twelve credit hours:

• Students with no prior graduate work will be required to take a minimum of ninety (90) credit hours to fulfill the requirements of the DrPH Program (It should be noted that some students may opt to take more credits). The total amount of credits hours required for the DrPH degree can be reduced based upon a student’s completion of previous relevant graduate course work. Even with prior graduate course work, a minimum of sixty (60) credit hours of course work must be taken at Morgan State University in the DrPH Program. In addition, twelve (12) credits (which were not counted towards the previous graduate degree) may be transferred from previous graduate programs.
• Successfully complete all core courses before taking the comprehensive examination which has written and oral components.
• Pass the comprehensive examination. Note: The comprehensive examination may be repeated only once.
• Submit an approved dissertation in partial fulfillment of the DrPH degree. When the dissertation has been completed to the satisfaction of the dissertation chairperson, a dissertation defense will be scheduled at which time the student must orally defend his/her work before the entire dissertation committee. Graduation from the program is dependent upon successful completion of a dissertation.

Complete all the requirements of the DrPH degree within a period of seven (7) consecutive years.
NOTE: Program length will vary for students who are part-time.
Residency Requirements
All full-time students must complete a minimum of two consecutive semesters in residence; with at least nine (9) credit hours of course work per semester, to satisfy the residency requirement of the program and University. A full course load within the DrPH program consists of twelve (12) credit hours per semester. Upon completion of course requirements and successfully passing the comprehensive examination, the DrPH candidate must continue to register for PUBH 997 Dissertation Guidance each semester until the dissertation is fully and successfully completed.

Transfer Students from Other Morgan State University Graduate Programs
The School of Public Health and Policy (School) will accept MSU students from other graduate degree programs wishing to go into the field of public health. Such students will be assessed on an individual basis regarding their public health interest, relevance of prior undergraduate and graduate courses to the School, academic performance in their respective fields as well as their potential to cope with public health science-based courses. A maximum of twelve (12) graduate credits of course work may be transferred from other graduate programs.

Program of Study (Students with an MPH Degree)
The core curriculum, designed to provide fundamental knowledge of major areas of public health, is required of all DrPH degree students. As the School undergoes a transition to School status, the following curriculum is slated for the 2006-2007 academic year. All subsequent years' curriculum will be distributed at the time of student's entry into the DrPH program. A total of 24 credit hours are designated for the DrPH degree core area and the courses are as follows:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUBH 510</td>
<td>Principles, Theories, Practice of Community Health Education</td>
<td>3</td>
</tr>
<tr>
<td>PUBH 601</td>
<td>Epidemiology II</td>
<td>3</td>
</tr>
<tr>
<td>PUBH 604</td>
<td>Research Methods I</td>
<td>3</td>
</tr>
<tr>
<td>PUBH 605</td>
<td>Policy, Advocacy, &amp; Ethics</td>
<td>3</td>
</tr>
<tr>
<td>PUBH 609</td>
<td>Biostatistics II</td>
<td>3</td>
</tr>
<tr>
<td>PUBH 708</td>
<td>Research Methods II</td>
<td>3</td>
</tr>
<tr>
<td>PUBH 710</td>
<td>Strategies for Health Promotion, Planning, and Program Development</td>
<td>3</td>
</tr>
<tr>
<td>PUBH 713</td>
<td>Community and Social Epidemiology</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>24</td>
</tr>
</tbody>
</table>

Program of Study Pre-Requisite (Students without an MPH)
The core curriculum pre-requisite, designed to provide fundamental knowledge of major areas of public health, is required of all DrPH degree students without an MPH. A student's transcript will be evaluated to determine if the following courses were taken in their previous Masters Program. A total of 21 credit hours are designated for the MPH degree core area and must be completed or appear on a student's transcript. The courses are as follows:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUBH 500</td>
<td>Epidemiology I</td>
<td>3</td>
</tr>
<tr>
<td>PUBH 501</td>
<td>Biostatistics I</td>
<td>3</td>
</tr>
<tr>
<td>PUBH 502</td>
<td>Behavioral Science of Public Health</td>
<td>3</td>
</tr>
<tr>
<td>PUBH 504</td>
<td>Introduction to Public Health and Public Health Practice</td>
<td>3</td>
</tr>
<tr>
<td>PUBH 505</td>
<td>Biological Basis of Public Health</td>
<td>3</td>
</tr>
<tr>
<td>PUBH 512</td>
<td>Demography and Family Health</td>
<td>3</td>
</tr>
<tr>
<td>PUBH 603</td>
<td>Community Needs and Assessment</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>21</td>
</tr>
</tbody>
</table>

Future Departments/Concentration Offerings
The new School will be organized into the following departments: Public Health Analysis, Behavioral Health Sciences, and Health Policy and Administration. Incoming DrPH students will be able to choose from an array of concentrations and emphasis areas.

Summary for DrPH Degree Coursework

<table>
<thead>
<tr>
<th>Degree Coursework</th>
<th>Total Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Core Courses</td>
<td>24</td>
</tr>
<tr>
<td>Required Courses</td>
<td>12</td>
</tr>
<tr>
<td>Elective Courses</td>
<td>12+</td>
</tr>
</tbody>
</table>
DOCTOR OF PUBLIC HEALTH (DrPH)

Professional Field Internship  3-9  
Dissertation Seminar 6  
Dissertation Guidance 6+  
Research Interests 12+

A Total of 90 Minimum Credits are required for the Doctor of Public Health (DrPH) Degree with no previous graduate degree.

A Total of 60 Minimum Credits are required for the Doctor of Public Health (DrPH) Degree with previous graduate degree

All students with previous graduate degrees must complete a minimum of 60 credits at Morgan State University.

Doctoral Dissertation
The doctoral dissertation is designed to provide students with a comprehensive and original research experience, and requires a minimum of twelve (12) hours of dissertation credits. The dissertation credits are completed after the successful completion of course-work and passing the comprehensive examination. The School is committed to helping students identify possible dissertation problems early in the program so that their progress can be expeditious. During research Methods I and II, students are expected to develop and present a preliminary proposal as a step in the preparation of the doctoral dissertation.

Internship
A minimum six (6) credit hours of internship is required of every DrPH student. The internship provides the student an opportunity to engage in community practice experiences by working with ongoing community projects. Depending on the student’s interest, the internship may be carried out in governmental or non-governmental health agencies, health institutes, or academic units and programs of public health.

Comprehensive Examination
The comprehensive examination contains both written and oral components, and each doctoral student must pass the examination at a proficiency established by the School of Public Health and Policy. At a minimum, the comprehensive examination covers content from core and required courses.
DrPH RECOMMENDED ORDER OF COURSES

Fall (Year 1)
- PUBH 510 Principles, Theories, Practice of Comm. Health Education 3
- PUBH 601 Epidemiology II 3
- PUBH 604 Research Methods I 3
- PUBH 609 Biostatistics II 3

Spring (Year 1)
- PUBH 605 Policy, Advocacy & Ethics 3
- PUBH 708 Research Methods I 3
- PUBH 710 Strategies for Health Promotion, Planning, and Program Development 3
- PUBH 713 Social Epidemiology 3

Comprehensive Examination

Fall (Year 2)
- PUBH 617 Application of Statistical Packages in PH 3
- PUBH 616 Grants Management Qualitative Research Methods (Outside SPHP: E.g. BUAD 700, RDHE 619, OR EDSR 624) 3
- Elective 3

Spring (Year 2)
- PUBH 651 Practicum Experience in the Field (Internship II) 3
- PUBH 711 Principles of Social Marketing 3
- PUBH 720 Mixed Methods 3
- PUBH 709 Biostatistics III 3

Summer (Year 2)
Proposal Exam Completed

Fall (Year 3)
- PUBH 618 Community Outreach: PH Issues & Principles 3
- PUBH 751 Internship Practicum (Internship III) 3
- PUBH 998 Dissertation Seminar 6

Spring (Year 3)
- PUBH 997 Dissertation Guidance 3
- Directed Electives 3

Fall (Year 4) and Subsequent Semesters
- PUBH 997 Dissertation Guidance 3
MASTER OF PUBLIC HEALTH (MPH)

School of Public Health and Policy
Allan S. Noonan, MD, MPH
Dean
Tel: (443) 885-3238/3638; Fax: (443) 885-8309
E-mail: anooran@moac.morgan.edu

Objective
To prepare students to be public health professionals who draw on knowledge and skills from a variety of disciplines to define, critically assess, and resolve urban public health problems. Morgan State University Public Health graduates will have a foundation in public health that enables them to be advocates, researchers and policy developers relative to urban public health problems.

Admission to the Program
For unconditional admission, applicants must have earned a bachelor and/or masters degree from an accredited college or university with a minimum academic grade point average (GPA) of 3.0 or above on previous baccalaureate or masters degree course work. Admission to the MPH or DrPH program is granted for only the fall semester and is based on the following requirements:

Three (3) letters of recommendation from practicing public health professionals and/or other professionals or academicians.
Career objectives as outlined in an entrance essay to be completed by the applicant.
Documentation of previous academic achievement, professional accomplishments, and earned degrees.
Results obtained on the Graduate Record Examination [sent directly from Education Testing Service (ETS)]. Test scores for MPH degree applicants may not be more than five (5) years old prior to date of application.
At least two (2) years of work-related experience in public health/ allied health field is preferred.
Interview with a member of the program admissions committee (in person when possible).

General Requirements for the Master of Public Health Degree
All students who seek to earn the Master of Public Health degree will be required to complete a total of 48 graduate credit hours including an Internship for a minimum of three (3) credit hours, (six [6] credit hours for students with no previous public health experience), plus the culminating Integrating Experience course for three (3) credit hours.

Residency Requirements
All full-time students must complete a minimum of two consecutive semesters in residence; with at least nine (9) credit hours of course work per semester, to satisfy the residency requirement of the program and University. A full course load within the MPH program consists of twelve (12) credit hours per semester. Part-time candidates for the MPH degree will satisfy residency requirements by completing 18 credit hours over a period of consecutive semesters. Upon completion of course requirements and successfully passing the comprehensive examination, the MPH candidate must continue to register for course work each semester until the requirements are fully and successfully completed.

Transfer Students from Other Morgan State University Graduate Programs
The School of Public Health and Policy (School) will accept MSU students in good standing from other graduate degree programs wishing to go into the field of public health. Such students will be assessed on an individual basis regarding their public health interest, relevance of prior undergraduate and graduate courses to the School of Public Health and Policy, academic performance in their respective fields as well as their potential to cope with public health science-based courses in the new program. A maximum of twelve (12) graduate credits of course work may be transferred from other graduate programs.

Program of Study
The core curriculum, designed to provide fundamental knowledge of major areas of public health, is required of all MPH degree students. The core courses cover the areas of environmental health, quantitative methods, health planning, policy and administration, as well as, social and behavioral factors in public health. As the School undergoes a transition to School status, the following curriculum is slated for the academic year 2006-2007. All subsequent years’ curriculum will be distributed at the time of student’s entry into the MPH program. A total of 21 credit hours of graduate courses are designated for the MPH degree core area and nine (9) credits of required courses. These courses are outlined as follow:
### Core Courses

- PUBH 500 Epidemiology 3
- PUBH 501 Introduction to Biostatistics 3
- PUBH 502 Introduction to the Behavioral Science of Public Health 3
- PUBH 504 Introduction to Public Health & Public Health Practice 3
- PUBH 505 Demography and Family Health 3
- PUBH 512 Biological Basis of Public Health 3
- PUBH 603 Community Needs Assessment 3

### Required Courses

- PUBH 503 Health Services Policy & Planning 3
- PUBH 506 Environmental Health Sciences 3
- PUBH 610 Introduction to Public Health Research 3

Additional required courses will be taken as indicated in the student's approved plan of study, which will be developed cooperatively by the student and his/her advisor and submitted to the full faculty for approval. The remaining credits consist of elective courses from the student's approved plan of study.

### Future Department/Concentration Offerings

The new School will be organized into the following departments: Public Health Analysis, Behavioral Health Sciences, and Health Policy and Administration. Incoming MPH students will be able to choose from five (5) areas of concentration: Social and Behavioral Health Sciences, Biostatistics, Environmental Health, Epidemiology, and Health Policy and Administration.

### Summary for MPH Degree Coursework

<table>
<thead>
<tr>
<th>Category</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Core Courses</td>
<td>21</td>
</tr>
<tr>
<td>Required Courses</td>
<td>9</td>
</tr>
<tr>
<td>Elective Courses</td>
<td>3</td>
</tr>
<tr>
<td>Professional Field Internship (Required)</td>
<td>6</td>
</tr>
<tr>
<td>Integrating Experience (Required)</td>
<td>3</td>
</tr>
<tr>
<td>Total Credits for the Master of Public Health (MPH) Degree</td>
<td>48</td>
</tr>
</tbody>
</table>

### MPH Recommended Order of Courses

#### Fall (Year 1)

- PUBH 501 Introduction to Biostatistics 3
- PUBH 502 Introduction to the Behavioral Science of Public Health 3
- PUBH 504 Introduction to Public Health and Practice 3
- PUBH 512 Biological Basis of Public Health 3

Oral Review by faculty committee to document readiness for Progression and Internship in the program

#### Spring (Year 1)

- PUBH 500 Epidemiology I 3
- PUBH 505 Demography and Family Health 3
- PUBH 603 Community Needs and Assessment 3
- PUBH 551 Application of PH Principles (Internship-Not on Comp.) 3

#### Comprehensive Examination

#### Fall (Year 2)

- PUBH 503 Health, Services, Policy and Planning 3
- PUBH 610 Introduction of PH Research 3
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUBH 651</td>
<td>Internship (Practice in the Field)</td>
<td>3</td>
</tr>
<tr>
<td>PUBH 710</td>
<td>Strategies for Health Promotion, Planning, and Program Development</td>
<td>3</td>
</tr>
</tbody>
</table>

**Spring (Year 2)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUBH 506</td>
<td>Environmental Health</td>
<td>3</td>
</tr>
<tr>
<td>PUBH 607</td>
<td>Integrating Experience</td>
<td>3</td>
</tr>
<tr>
<td><strong>PUBH Advanced Social Analysis Course (Choose One of the Following):</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PUBH 601</td>
<td>Epidemiology II</td>
<td>3</td>
</tr>
<tr>
<td>PUBH 609</td>
<td>Biostatistics II</td>
<td></td>
</tr>
<tr>
<td>PUBH 720</td>
<td>Qualitative Methods in Public Health</td>
<td>3</td>
</tr>
<tr>
<td><strong>PUBH Special Health Issue Course</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Public Health Analysis

PUBH 500    Epidemiology I
Three Hours: 3 Credits
This course introduces epidemiological definitions, review of vital statistics and other sources of public health data, methods for calculating distributions and behavior of diseases, rates of morbidity and mortality, sensitivity and specificity, and life tables.

PUBH 501    Biostatistics I
Four Hours: 4 credits
This is the basic course in Biostatistics, which will cover rates and ratios, graphical presentation of data, measures of central tendency and dispersion, probability, probability distributions, sampling distributions, estimations, confidence interval, estimation of sample size, odds ratios and relative risks with application in health related data.

PUBH 512    Biological Basis of Public Health
Two Hours: 2 credits
Students will gain an understanding of the basic pathophysiology, natural history, clinical manifestation, prevention and control of common chronic and communicable diseases prevalent in domestic urban environments.

PUBH 601    Epidemiology II
Three Hours: 3 Credits
The course focuses on a comprehensive review of the distribution and determinants of disease in human populations. Special attention will be given to understanding the basis for interventions designed to modify and improve disease’s natural progression and applying applications of Epidemiology to major health issues. Topics include sampling methods, study designs, measurement outcomes, communicating results of epidemiological studies and policy development and implementation. Prerequisite: Completion of PUBH 500 Epidemiology I or its equivalent.

PUBH 603    Demographic Methods and Community Needs Assessment
Three Hours: 3 Credits
This course prepares students to utilize demographic methods, develop, and understand the multiple methods used to develop and implement community assessments that address specific public health problems. Topics of discussion will include the standardization, mathematical basis of life tables, and multiple decrement life tables, detailed measures of fertility, mortality, population growth, and migration. Students will also focus on drawing conclusions and providing recommendations for community-related programs.

PUBH 604    Research Methods I
Three Hours: 3 Credits
Examines issues in conceptualizing and determining the appropriate study design for research problems, strengths and weaknesses of research designs, review processes for preparation of proposals, including budgeting for research and program grants.

PUBH 609    Biostatistics II
Three Hours: 3 Credits
This is the second course in the series of Biostatistics, which covers tests of hypotheses (the means, the proportions and the variances), type I and type II errors, non-parametric tests, chi-square, one-way and two-way ANOVA, simple and multiple correlation, linear and multiple regression with applications in health related data.
PUBLIC HEALTH - COURSE DESCRIPTIONS

Prerequisite: Completion of PUBH 501 Biostatistics I or its equivalent.

PUBH 610 Introduction to Public Health Research
Two Hours: 2 Credits
Examine issues in conceptualizing and determining the appropriate study design for research problems, strengths and weaknesses of research designs, review processes for preparation of a grant for the MPH student.

PUBH 617 Application of Statistical Packages in Public Health
Three Hours: 3 Credits
This course will introduce and promote mastery of SPSS and STATA software in the construction of simple and complete data sets and the analysis of data. The course is designed to make application of knowledge gained in Biostatistics courses to the analysis of epidemiological data.
Prerequisites: PUBH 501, PUBH 609 and completion of the comprehensive examination or consent of instructor.

PUBH 708 Research Methods II
Three Hours: 3 Credits
This course continues to examine issues in determining the appropriate study design for research problems, strengths and weaknesses of research designs, and review processes for preparation of a grants.
Prerequisite: PUBH 604 Research Methods I

PUBH 709 Biostatistics III
Four Hours: 4 credits
This is an advanced level course in Biostatistics. The course will cover simple and multiple regression; hypotheses testing in multiple regression; confounding and interactions; residual analysis; treating of outliers and collinearity; the use of dummy variables; logistic regression estimation and interpretation; and survival analysis.
Pre-requisites: Completion of PUBH 501 Biostatistics I and PUBH 609 Biostatistics II or its equivalent.

PUBH 713 Community and Social Epidemiology
Three Hours: 3 Credits
This course introduces students to the basic principles for assessment of psychosocial determinants within communities unduly burden by health disparities. Topics include research ethics, design and implementation methodologies appropriate for community-based entities, including non-profit, public and private CBO and FBO agencies.

PUBH 718 Maternal, Child, and Family Health Epidemiology
Three Hours: 3 Credits
This course will provide an in-depth analytical framework of the epidemiology of maternal and child health (MCH) from pre-conception to pregnancy to late adolescence. Factors contributing to pregnancy decision making, adverse pregnancy outcomes, and early and late childhood growth and development will be systematically reviewed. In addition, geographic, environmental, demographic, behavioral, genetic and medical impacts on pregnancy outcomes will be presented.

PUBH 720 Qualitative Research in Public Health
Three Hours: 3 Credits
This course will focus on the use of both quantitative and qualitative methodologies to answers research questions. It will discuss the epistemology of both research designs, describe the evaluation of missed method utilization, contrast and compare the strengths and weaknesses of qualitative and quantitative, assess how to match specific methods to the appropriate research questions and critically analyze the controversy regarding the integrity of the methods. Lastly, the course will provide opportunities for developing specific qualitative research skills while gaining familiarity with theories, issues, and problems in qualitative research.

PUBH 709 Biostatistics III
Four Hours: 4 credits
This course covers questionnaire design, surveys and sample size in survey sampling, manual coding and editing of survey data, computer editing and preparing data for analysis. The course discusses how to operationalize concepts, research questions and
design, develop and test survey instruments, taking account of intended uses of the data collected. The course also discusses simple random sampling, stratified sampling, cluster sampling and multistage sampling. The students will be able to identify the sampling and non-sampling errors and also will be able to understand the use of multilevel statistical models.

**PUBH 729  Design and Application of Case-Control Studies**  
**Three Hours: 3 Credits**  
This course reviews issues and theories underlying the design of case-control and other case-based methods in epidemiology and their applications. This course discusses the strengths and limitations of case-control studies. The students will be able to identify problems that are appropriate for a case-control study and will be able to design a case-control study and conduct its analysis. Students will be able to apply the case-control method to various problem-solving situations by overcoming some of the inherent problems in these studies.

**PUBH 723  Design and Application of Cohort Studies**  
**Four hours: 4 credits**  
The course provides a comprehensive introduction to the design, analysis and application of the cohort study design. This course also provides students with an understanding of the fundamental role of time in epidemiological studies and of time-dependent relationships between exposures and outcomes. This course discusses sources of errors in exposure assessment; bias; time-dependent exposures and confounders; sampling strategies for nesting case-control studies; and sample size estimation for planning a cohort study.

**PUBH 611  Disease Specific Analysis and Evaluation**  
**Three Hours: 3 Credits**  
This course will analyze and evaluate various health disorders and provide an opportunity for intensive study of selected disease topics as they relate to the field of public health. These topics will vary from semester to semester.

**PUBH 732  Mental Health Research**  
**Three Hours: 3 Credits**  
This course will examine the latest research in the field of behavioral and psychology relevant to promoting mental health and/or addressing mental health problems with a focus on racial/ethnic variations. Students will also explore, conduct, and publish research on mental health in populations of color.

**PUBH 725  Epidemiology of Mental Health**  
**Three Hours: 3 credits**  
This course will explore the issues of mental health, mental illness and mental health services within the United States using a life course perspective. The course will also examine the disparities in the distribution of health and health services with particular emphasis on populations of color.

**PUBH 727  The Epidemiology of Drug Use and Addiction**  
**Three Hours: 3 Credits**  
This course covers the epidemiology of substance use and addiction. Topics covered include smoking, alcohol and illicit and licit drugs. The covered topics are presented within the context of their relevance to public health, prevalence and incidence of drug and alcohol use, and problems related to their use. Students will also examine factors contributing to variations and disparities in drug use and their consequences for subgroups in the population.

**PUBH xxx  Substance Abuse Research Methods**  
**Four Hours: 4 credits**  
This course provides innovative research methodologies and unique research approaches that examines substance use in communities and populations. Additionally, the relevance of substance use research to policy development and implementation will be presented and analyzed. Each student will select an issue, write a publishable literature review on the topic and present the findings.
PUBH 730 Community Health Education and Research
Four Hours: 4 credits
This course provides a critical examination of major intervention methods used in health promotion disease prevention programs. It provides a detailed exploration of the ways to tailor these methods to diverse community settings. This includes meaningful collaboration with stakeholders, monitoring and evaluation based on goals and objectives, and tool development and data collection strategies. Each student will select an issue, write a publishable literature review on the topic and present the findings.

PUBH 738 Nutrition Research
Four Hours: 4 credits
This course will critically examine currently used research methods, indicators and analytical approaches to assess their relevance to problem identification and solution for federally funded food and nutrition courses. Each student will select an issue, write a publishable literature review on the topic and present the findings in a special session organized to include local and national Public Health Nutrition practitioners.

PUBH 736 MCH Research
Three Hours: 3 Credits
This course will critically examine currently used Maternal and Child Health research methods, indicators and analytical approaches to assess their relevance to problem identification and solution. Each student will select an issue, write a publishable literature review on the topic and present the findings in a special session organized to include local and national Maternal and Child Health practitioners. Maternal and Child Health Epidemiology is a prerequisite for this course.

Health Policy and Management

PUBH 503 Health Services Policy and Planning
Three Hours: 3 Credits
This course includes an overview of the basic institutions and key health policy issues which shape the current health care delivery system in America, including a basic analysis of providers and consumers of health care. The capacity and interrelationship of federal, state, and local public health agencies will be explored with emphasis placed on the core public health functions which promote the health improvement imperative for all individuals and communities.

PUBH 504 Introduction to Public Health and Public Health Practice
Three Hours: 3 Credits
The course provides an introduction to the history of public health, as well as, the science, politics, and healthcare agencies at the federal, state and local levels. These agencies are examined regarding to their legislative mandate, budget, scope of services, and future directions. The varying ideologies by which public health services are delivered will also be examined.

PUBH 506 Environmental Health Sciences
Three Hours: 3 Credits
This course examines the effects of biological, chemical and physical environmental agents on humans. The course will focus on the health issues, scientific understanding of causes, and approaches to control of environmental health problems. Students will develop an understanding of the effects of various environmental issues on the health of populations.

PUBH 605 Policy, Advocacy, and Ethics
Three Hours: 3 Credits
This course is designed to provide students with the concepts and complexities of policy, ethics, and advocacy presented in public health and research. The principal features, critical ideological issues, development of the future national and global policy and contemporary public health issues will be discussed.

PUBH 712 Health Policy, Politics, and Law
Three Hours: 3 Credits
This course includes a description and critical evaluation of major public and private attempts to change the organization, delivery, and financing of health care in the U.S. Contemporary political issues are discussed with reference to legislative attempts to affect changes in specific aspects of population health, and the rationale for such change or policy modification.
PUBH 716  Introduction to Complementary and Alternative Medicine in Public Health
Three Hours: 3 Credits
The course will introduce students to historical and contemporary issues facing the use and practice of CAM modalities, globally and in the United States. Topics covered include an overview of the basic concepts and characteristics of CAM; historical perspectives of complementary health practice and development of integrated health care; factors influencing CAM use and practice; ethical issues in biomedical CAM research; federal regulation and policies related to the access and practice of CAM.

PUBH 717  Bioterrorism as a Public Health Problem
Three Hours: 3 Credits
This course will increase student understanding of the political, economical and cultural implications of Bioterrorism and the government’s role in preparing and protecting Americans. The course will emphasize the cultural implications of an all-hazards approach to disaster preparedness, response, and recovery planning.

PUBH 803  MCH Politics and Policy
Two Hours: 2 credits
This course will examine current Title V and related programs to determine the current politics that serve as barriers or facilitators to optimal funding and program continuation. Issue papers will be developed highlighting the politics, and experts will be invited to enrich the classroom learning experience. Students will attend legislative sessions at state and national levels as available and prepare and deliver testimony in an effort to help shape Maternal and Child Health policy. Maternal and Child Health Epidemiology is a prerequisite for this course.

PUBH 802  Policy Analysis for the Elimination of Health Disparities
Four Hours: 4 credits
This course focuses on the development of skills in the use of planning and policy development methods. It includes techniques for integrating development and use of data systems, problem identification and analysis, priority setting, determination of intervention strategies and resource allocation, and regulatory processes with reference to selected health disparities.

PUBH 722  Conceptual Frameworks for Policy Development
Three Hours: 3 Credits
Basic theoretical concepts and substantive findings of health policy options related to and in the context of public and community health. Includes applications for translating policy and use of current techniques in decision analysis for integration of policy into organizational plans, structures, emergency response plans, and programs.

PUBH 728  Understanding Effective Communication in Health Systems
Three Hours: 3 Credits
Applications of communication theory, human relations concepts, health marketing methods, and information technology to the internal communications of public health managers and administrator’s work environment and/or settings.

PUBH 726  Leadership for Change
Two Hours: 2 credits
This course focuses on the development of skills required for guiding, directing and influencing others to bring about fundamental change, not only in external processes but also internal processes based on vision and mission for health care organizations. Includes applications for coaching, self-assessment, delegation, goal clarity, risk-taking, learner-centered education and training, and re-enforcement strategies for ushering in fundamental change in public health in the 21st century.

PUBH 804  Managing Health Services Organization
Three Hours: 3 Credits
This course focuses on applications of management strategies, evaluation of alternatives, and implementation of a system assessment. Includes discussion of specific problems involving health consumers, health services budgets, and health personnel in profit and not for profit organizations.
PUBH 724 Human Capital Development in the Public Health Force
Two Hours: 2 credits
An analysis of the methods and issues pertaining to recruitment, selection, promotion, continuing education and training, and re-
muneration of members of the health care workforce. Includes discussion of extended and expanded roles for community-based practice in urban health care settings.

PUBH xxx Special Topics in Policy and Administration
Two Hours: 2 credits
Vary from semester to semester, to provide the opportunity for intensive study of selected policy and/or management topics or specific method of analysis in the field of public health.

PUBH 737 Emerging Public Health Nutrition Politics
Three Hours: 3 Credits
This course will critically examine the historical and current legislative mandate for the federally funded food and nutrition pro-
grams. Policy relevant issues will be examined and experts invited to enrich the in class learning experience. Each student will select a unique issue and develop a white paper. Students will seek opportunities at state and national levels to attend legislative sessions and provide testimony.

PUBH 739 Ethics in Public Health Research and Practice
Four Hours: 4 credits
This course will introduce students to the principles of ethics and their relationship to current major topics in the field of public health. It will provide them with the skills needed to assess and describe various approaches to ethical issues in public health research and practice. Each student will select an issue, write a publishable literature review on the topic and present the findings.

PUBH 707 Prevalent Ethical Issues in Public Health
Three Hours: 3 Credits
This course will focus on the interdisciplinary study of certain ethical issues and public health discourse about these issues within health care institutions, the media, and legislature. Topics may include life-savings medical technologies, problems of rationing care, Roe vs. Wade (abortion), fetus tissue research, resource for community participation, environmental ethics, global health ethics, and the birth of ethics now known as the Tuskegee syphilis study.

PUBH 807 Ethical Practice: Questions and Application
Two Hours: 2 credits
This course will examine methodologies and resources which are currently applied in the field of ethics as evidence to guide de-
cision making in public health, religion and professional societies. Concrete examples of cross-cutting issues that challenge the balance between protections of individual rights against the interest of the public will be included for class debates in a variety of settings.

PUBH xxx Policy Implications of Environmental Justice
Three Hours: 3 Credits
This course will examine the research, education and health policy needs of the various populations in the United States who bear a disproportionate burden and share of exposures to environmental and occupational hazards in the communities where they live and work.

Behavioral Health Sciences Department

PUBH 502 Behavioral Science of Public Health
Three Hours: 3 Credits
Fundamental elements and concepts of community health education, health promotion and disease prevention; and their asso-
ciation with social, behavioral, and physical sciences in relation to health maintenance, optimal health, disease prevention and control of various forms of community health problems.
PUBH 510  Principles, Theories and Practice of Community Health Education  
Three Hours: 3 Credits  
The purpose of this course is to give students an opportunity to acquire knowledge and understanding of the principles, models and theories utilized in health education and health promotion, disease prevention, research, program planning and development.

PUBH 608  Substance Abuse in Minority Populations  
Three Hours: 3 Credits  
This course will acquaint the student with theories of addiction that will elucidate causes of drug and alcohol use/abuse. Additionally, students will learn about the impact of substance use/abuse on special populations and communities e.g. women, African Americans, and the strategies for preventing the problem of substance use/abuse will be examined and critiqued.

PUBH 613  Public Health Nutrition and Family Health  
Three Hours: 3 Credits  
The course focuses on the relationship between diet and health with the goal of providing a foundation for informed dietary decisions as well as an appreciation of the strengths and limitations of the present knowledge of nutritional science. The nutritional needs of different populations will be studied and the way in which public policy programs affect these needs will be explored.

PUBH 615  Public Health Seminar  
Three Hours: 3 Credits  
This course is designed to provide an opportunity for students to be exposed to current topics in public health practice and research. This course will be team taught with different Public Health Program faculty meeting each week to critically review literature in public health.

PUBH 618  Community Outreach: Public Health Issues and Principles  
Three Hours: 3 Credits  
This course allows advanced students the opportunity to apply theories and models of public health to the solution of community problems. Issues related to funding for public health programs are also discussed.

PUBH 710  Strategies for Health Promotion, Planning, and Program Development  
This course focuses on the concepts and issues in health promotion and program development with the emphasis on modifying group and individual high-risk behaviors which includes planning, program development and implementation as preventive health services. Topics will also include the Healthy People 2010 objectives as the framework for addressing programming demands.

PUBH 711  Public Health Principles of Social Marketing  
Three Hours: 3 Credits  
This course will examine issues in the relationship between public health marketing methodology and social systems using qualitative methods. Individual knowledge, attitudes, beliefs and practices that can be used to develop public health messages and marketing strategies that influences healthy behavior will be analyzed.

PUBH 719  Critical Public Health Issues on Minority Drug Use  
Three Hours: 3 Credits  
This course provides a comprehensive review of drug problems among minority and underserved populations in the US, and in Maryland, and provides opportunities to review, discuss, and develop alternative solutions to health disparities and hazards associated with substance use.

PUBH 731  Best Practices of Health Communications  
Three Hours: 3 Credits  
This course provides an overview of theory and research on persuasive communication, with an emphasis on discerning and applying best practices in diverse segments of the US population. Situation, policy and audience analysis; message development and pre-testing of interpersonal communication and mass media campaigns will be addressed.
PUBH 621  Community Health Planning and Evaluation
Three Hours: 3 Credits
This course examines the fundamentals of planning and evaluating community health education programs. It covers sources of evidence underlying program recommendations to the use of theory to guide program planning, development and implementation. Practical methods and skills for creating logic models, designing evaluation plans and instruments, and presenting data and writing reports are highlighted.

PUBH 733  MCH Program Performance and Evaluation
Two Hours: 2 credits
This course will examine the historical and current legislative mandate for title V and other related programs. Formal program evaluations will be reviewed with a critical analysis of methodology and findings. The class will develop a program evaluation proposal for one MCH program judged to have policy importance and potential impact. Maternal and Child Health Epidemiology is a prerequisite for this course.

PUBH 612  Substance Use and Co-Morbid Mental Health Disorders
Two Hours: 2 credits
This course covers such areas as the prevalence and etiology of substance use (includes smoking, and illicit substances and drugs and co-morbid mental disorders with an emphasis on understanding the existence of health disparities in mental health disorders and substance use. In addition the course will present strategies and methods for addressing the identified co-morbid conditions.

PUBH 735  Federal Nutrition Program Performance Evaluation
Three Hours: 3 Credits
This course will critically examine federally funded food and nutrition program evaluations that have been conducted in the past to assess their effectiveness in identifying outcomes that serve to enhance funding and policy development. Special emphasis will be placed on examining the utility of the performance indicators to answer evaluation questions.

Special Studies

PUBH 714  Special Studies
Three Hours: 3 Credits
This course will examine special topics in the field of public health. The specific course content and faculty will vary each semester. Topics will vary from semester to address contemporary population issues.

PUBH 715  Research Seminar and Public Health
Three Hours: 3 Credits
This course will provide an opportunity for students to critically examine current literature related to public health problems, understand the role and value of academic/institutional sponsored research, discuss issues and concepts relevant to public health and begin to examine critically the scientific merit of at least one research project within the Public Health Program.

PUBH 999  Research
Three Hours: 3 Credits
This course will examine special research topics in the field of public health. The specific course content and faculty will vary each semester. Student evaluation will be based on class participation and assigned projects. Topics will vary from semester to address contemporary population issues.

INTERNSHIP PRACTICE

PUBH 551  Application of PH Principles (Internship I)
Two Hours: 2 credits
This web-enhanced course is intended for new or beginning MPH practitioners with limited or no experience in the health care marketplace. The focus of the course is the application of public health principles and skills to practical problems with supervision
provided by an agency mentor and faculty advisor. Acquiring competency in assessment, goal-setting and planning is the intended outcome for the student. Prerequisite: Completion of all core courses or its equivalent.

**PUBH 651 Practicum Experience in the Field (Internship II)**
Four Hours: 4 credits
This web-enhanced course is intended for MPH practitioners with previous work experience in the healthcare industry. Acquiring competency in developing a strategy, analyzing the process, and implementing the plan for an identified public health problem is the intended outcome for the student.
Prerequisite: Completion of all core courses or its equivalent.

**PUBH 751 Practicum Experience Synthesis (Internship III)**
Three Hours: 3 Credits
This web-enhanced course is an advanced level practicum intended for MPH or DrPH practitioners with extensive previous work experience in the health care industry. Acquiring competency in leadership and systems skills and policy development/program planning skills is the intended outcome for the student.
Prerequisite: Completion of all core courses or its equivalent.

**Research Required Courses**

**PUBH 607 Integrating Experience**
Three - Six Hours: 3-6 credits
This web-enhanced course is intended to be the capstone experience for all MPH students. This course provides students an opportunity to demonstrate their ability to integrate and apply core MPH competencies to a relevant public health problem. The framework for development of the Integrating Experience may include one of four options by the student: Program Evaluation Proposal; Program Plan; Problem Solving Analysis; or a Research Report. The students' process culminates in the last semester when students present their final projects in a formal symposium. The students' deliverables for this course are a practicum paper, a scientific presentation and professional poster session held during the annual symposium organized for this course.

**PUBH 797 Thesis Guidance**
Two Hours: 2 credits
Provides the MPH student with continuous faculty supervision until the thesis is approved by the departmental committee. Thesis Guidance courses earn “S” grades.

**PUBH 798 Thesis Seminar**
Three Hours: 3 Credits
Provides the MPH student with group and one-on-one study between the student and thesis advisor. The advisor will provide the student with the framework for researching and writing a topic of mutual agreement. The grade is “CS” until the thesis is completed and approved. When the thesis is completed, a letter grade is awarded.

**PUBH 997 Dissertation Guidance**
Three Hours: 3 Credits
Provides the DrPH student with continuous faculty supervision until the dissertation is approved by the departmental committee. The grade automatically becomes “S”. No other grade is permitted.

**PUBH 998 Dissertation Seminar**
Six hours: 6 credits
Provides the DrPH student with group and one-on-one study between the student and the dissertation advisor. The advisor will provide the student with the framework for researching and writing a topic of mutual agreement. The grade for this course is “CS” while the dissertation is still in progress. When the dissertation is accepted or completed, a letter grade is awarded.
SCHOOL OF COMPUTER, MATHEMATICAL & NATURAL SCIENCES

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DOCTOR OF PHILOSOPHY - BIOENVIRONMENTAL SCIENCES (Ph.D)

Goal
To produce highly skilled scientists who will apply knowledge derived from basic and applied research to address the multifaceted concerns of the Bioenvironmental Science community in a changing global society. The doctoral program in Bioenvironmental Science will utilize an integrated interdisciplinary approach designed to offer flexibility in areas of specialization and training to meet the changing bioenvironmental needs of the nation and global community in the 21st Century.

Objectives
• To provide graduate students with essential academic knowledge, research and practical skills needed for successful careers in Bioenvironmental Science related jobs at various private institutions, government agencies, academia, and industry
• To train students on the interaction between various components/systems of the environment and how to protect the health of humans in the changing environment
• To provide interdisciplinary and multidisciplinary research training that addresses the understanding of the underlying mechanism by which physical, chemical, and biological agents cause alterations in ecosystem integrity and cause morbidity and mortality in humans, animals, and other organisms, especially those of commercial value
• To develop cost-effective methodologies whereby the impact of various environmental pollutants and toxic substances may be prevented and/or controlled
• Establish partnerships with other research-intensive universities, government agencies, international organizations and the private sector that will provide training and internships to facilitate applied research activity and future career opportunities for students
• To establish community outreach programs that provide awareness regarding the impact of physical, chemical, biological, and toxic agents generated by natural or anthropogenic events on human health

General Program Description
The Ph.D. in Bioenvironmental Science offers research opportunities and instruction in five general areas of concentration: Environmental Toxicology, Environmental Science, Environmental Chemistry, Environmental Health Sciences, and Environmental Biotechnology. The courses offered in the program are primarily for doctoral students, however, students enrolled in the Master’s degree programs may participate. For example, Biology, Chemistry, and Engineering majors can enroll in suitable 500 and 600 level Bio-Environmental Science graduate courses for credit toward their degrees. The student is responsible for making the
necessary arrangements with an individual Bioenvironmental Science graduate faculty member. The consent of the chairperson of the student’s major department is also required.

**General Preparatory Requirements**

Students interested in the Ph.D. Program in Bioenvironmental Science must have a strong background in basic sciences including biology courses, physics, chemistry (through organic), and mathematics through calculus and differential equations. Course work in statistics and competence with computers are particularly important for perspective students.

**Admission Requirements**

Each applicant is also required to take and demonstrate satisfactory performance on the Graduate Record Examination (GRE) General Test (verbal, quantitative, and analytical), and GRE Subject Test (biology, chemistry, or another science). Scores on the GRE General and Subject (Biology) tests are essential for TA or fellowship consideration. Letters of recommendations from at least three academic referees should address the student’s motivation, ability to conceptualize and deal quantitatively with biological problems, and research potential. Evidence of research capability should be included. International students must submit a TOEFL score of at least 550.

**Program Requirements**

**CORE COURSES**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>CREDITS</th>
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<tbody>
<tr>
<td>BIOL 525</td>
<td>Cellular Biology</td>
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<tr>
<td>BIOL 639</td>
<td>Fundamentals of Bioenvironmental Sciences</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 607</td>
<td>Toxicology of Biological Systems</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 625</td>
<td>Seminar in Bioenvironmental Science (4X1 Credit)</td>
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</tr>
<tr>
<td>BIOL 627</td>
<td>Experimental Design &amp; Data Analysis</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 631</td>
<td>Bioethics &amp; Communications</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 600</td>
<td>Advances in Biochemistry</td>
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</tr>
<tr>
<td>CHEM 601</td>
<td>Environmental Chemistry</td>
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**AREAS OF CONCENTRATIONS**

**Environmental Toxicology**

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>BIOL 526</td>
<td>Molecular Biology</td>
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<tr>
<td>BIOL 602</td>
<td>Environmental Immunotoxicology</td>
<td>3</td>
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<tr>
<td>BIOL 626</td>
<td>Environmental Physiology of Plants</td>
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<tr>
<td>BIOL 627</td>
<td>Molecular Toxicology of Diseases</td>
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<tr>
<td>BIOL 628</td>
<td>Environmental Carcinogenesis</td>
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<td>BIOL 629</td>
<td>Developmental Neurotoxicology</td>
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<tr>
<td>CHEM 602</td>
<td>Analytical Techniques in Environmental Chemistry</td>
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**Electives and Seminars (To Be Determined)**

**Environmental Chemistry**

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<tr>
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<tbody>
<tr>
<td>CHEM 533</td>
<td>Statistical Methods in Analytical Chemistry</td>
<td>3</td>
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<td>CHEM 581</td>
<td>Techniques in Chemistry</td>
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<tr>
<td>CHEM 602</td>
<td>Analytical Techniques in Environmental Chemistry</td>
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<tr>
<td>CHEM 603</td>
<td>Physical Chemistry of Environmental Sciences</td>
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**Electives and Seminars (To Be Determined)**

**Environmental Science**

<table>
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<tr>
<th>COURSE</th>
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<tr>
<td>BIOL 521</td>
<td>Biocology</td>
<td>3</td>
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<td>BIOL 603</td>
<td>Marine and Aquatic Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 604</td>
<td>Ecosystem Analysis</td>
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<tr>
<td>BIOL 606</td>
<td>Environmental Toxicology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 609</td>
<td>Environmental Microbiology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 619</td>
<td>Business Concepts for Environmental Managers</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 626</td>
<td>Environmental Physiology of Plants</td>
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</table>

**Electives and Seminars (To Be Determined)**
DOCTOR OF PHILOSOPHY - BIOENVIRONMENTAL SCIENCES

Environmental Health Science
BIOL 610  Molecular Epidemiology of Infectious Diseases  3
BIOL 611  Food & Water Borne Diseases  3
BIOL 612  Advanced Environmental Health Sciences  3
BIOL 624  Environmental Biotechnology  3
BIOL 627  Molecular Toxicology of Diseases  3
BIOL 628  Environmental Carcinogenesis  3

Electives and Seminars (To Be Determined)

Environmental Biotechnology
BIOL 601  Molecular Biotechnology  3
BIOL 606  Environmental Toxicology  3
BIOL 620  Environmental Genetics  3
BIOL 621  Microbial Biochemistry  3
BIOL 624  Environmental Biotechnology  3
BIOL 626  Environmental Physiology of Plants  3

Electives and Seminars (To Be Determined)

Degree Program Requirements

General
Students are bound by the requirements stated in the catalog in effect when they enter the graduate program. The department in which the student specializes and the student’s advisory committee may, at their discretion, recommend additional requirements for the students.

Satisfactory Progress
To continue in a degree program a student must make satisfactory progress towards the degree. If the Graduate Committee determines that satisfactory progress is not being made, a student may be required to withdraw because of academic deficiency. Students may appeal this decision with the appropriate Morgan State University Academic and Status Degrees Committee.

Program of Study
The student’s program of study is subject to Graduate Council policies and individual program requirements. Doctoral programs include a major field or area of concentration.

A candidate for the Ph.D. must complete a minimum of 33 hours of graduate coursework beyond the master’s degree which is prerequisite for entry into most doctoral programs and a minimum of 60 hours of graduate course work beyond the baccalaureate degree. A minimum of 18 semester hours of the student’s coursework must be Morgan courses at the 600 levels, exclusive of dissertation hours. In addition, a minimum of 9 hours per semester of the course 800 (Doctoral Research and Dissertation) is required during the last two years of the student’s tenure within the program.

Time Limit
Comprehensive examinations must be taken and completed within three (3) years following initial enrollment in the Ph.D. program.

Continuous Registration
The student must register continuously for courses, 600 level or above, (minimum of 3 hours) from the time the doctoral research proposal is approved, admission to candidacy is accepted, registration for 600 level courses is begun, whichever comes first, including Summer semester and the semester in which the dissertation is approved and accepted by the School of Graduate Studies. A minimum total of 55 hours is required before the dissertation is accepted.

The Comprehensive Written and The Oral Examinations
The Comprehensive Examination will consist of written and oral portions. The written examination is fashioned by the student’s committee (possibly in collaboration with other faculty whose expertise is needed) and is administered over a two-day period fol-
lowed by an oral examination. The written examination is based in part on the student's coursework and in part on the general background that the Committee thinks is necessary to address specifically the proposed area of the dissertation research. The aim of the examination is to require students to review all prior coursework in the requirement and concentration areas. The examination will also test their ability to synthesize and interpret information in the critical intellectual fashion expected of Ph.D. candidates and to judge the aptitude of the candidate for carrying out original scientific research. Examination results may be used by the student's advisory committee to guide the student's selection of additional courses to complete the program. Copies of the examination questions along with the candidate's answers will be placed in the student's department file.

Oral examinations will be scheduled within two weeks of the written examination. Oral examinations are open to all faculty but closed to other students; only the candidate's advisory committee members will be responsible for scoring the candidate on the oral portion of the comprehensive examination. The examination will be held at a convenient time during the year for the Committee and the student and preferably should not be held during regular examination periods. An announcement must be distributed at least two weeks prior to the oral examination. The results of the written and oral examination will be announced immediately following the oral exam. The results will be pass, conditional pass, or fail. A conditional pass is accepted to mean pass, providing the student subsequently eliminates inadequacies by means stipulated by the committee. In the event of a failure, the Committee may elect to allow a single repetition of the examination.

Admission to Candidacy
Admission to candidacy reflects agreement among the student, Graduate Committee, and the School of Graduate Studies that the student has demonstrated the ability to do acceptable work and that satisfactory progress has been made toward the degree. This action usually connotes that all prerequisites to admission have been completed and a program of study has been approved.

A student may be admitted to candidacy for the doctoral degree after: (1) formation of the Advisory Committee, (2) passing the comprehensive examination, (3) fulfilling any language requirements for the Ph.D., (4) maintaining at least a B average in all graduate coursework, and (5) obtaining the Supervisory Committee's approval of the dissertation proposal and course program. A public oral defense of the proposal, constituting the general examination (described below) is included in step (5). Each student is responsible for filing the admission to candidacy form, which lists all courses required for the degree, including courses taken at Morgan State University or at any other institution. Prior to admission to the doctoral program, the admission to candidacy form must be signed by the Doctoral Committee. Admission to candidacy must be applied for and approved by the Graduate Committee and the School of Graduate Studies at least one full semester prior to the date the degree is to be conferred.

Teaching Requirement
As a requirement for graduation, all Ph.D. candidates must satisfactorily complete at least two academic years of teaching assistant (TA) duties in a department appropriate to the student's area of concentration. Discharge of this requirement will be scheduled by mutual agreement between the student, major advisor, and the Department Chair. Requests to discharge this requirement must be made to the Graduate Program by October 1 for Spring TA assignments and April 1 for Fall TA assignments. The Chair will act upon the request based on the Department's anticipated teaching need and the availability of tuition credits. The Department Chair will also certify that the TA assignment fulfills the requirements. The student will be compensated up to 6 credit hours of tuition scholarship in exchange for the TA duties. The instructor of the course in which the student is involved will certify that the student has satisfactorily discharged the TA duties and has met the teaching requirements as listed below. The completed original certification form is kept in the student's file.

The TA requirement may be discharged by activities related to either undergraduate labs or recitations in which the principal activity of the TA is instruction rather than grading or logistical support. The ideal TA experience would integrate a number of aspects of teaching including lectures and/or demonstrations, student evaluations (testing), and grading.

Dissertation Requirement
A dissertation is expected to treat a topic related to the candidate's specialty in the major subject, show the results of original research, provide evidence of high scholarship, and make a significant contribution to knowledge in the field. A general rule of thumb is that a typical dissertation is the equivalent of three publications in peer-reviewed journals. A dissertation defense must be scheduled. After revisions are made subsequent to the defense and approved by the student's Advisory Committee, the final draft of the dissertation must be submitted to the Dean of the School of Graduate Studies.
### SUMMARY OF PROCEDURES FOR DOCTORAL DEGREE

<table>
<thead>
<tr>
<th>PROCEDURES</th>
<th>UNDER THE DIRECTION OF</th>
<th>DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admission as a potential degree candidate</td>
<td>School of Graduate Studies and Major Department</td>
<td>Prior to completing 15 hours of graduate courses</td>
</tr>
<tr>
<td>Appointment of Doctoral Committee*</td>
<td>The School of Graduate Studies on recommendation of Department Chair</td>
<td>Preferable during first year of graduate study, but at the latest, prior to application for admission to candidacy</td>
</tr>
<tr>
<td>Comprehensive Examinations*</td>
<td>Major Department</td>
<td>Prior to admission to candidacy</td>
</tr>
<tr>
<td>Language Requirement(s)**</td>
<td>Major Department</td>
<td>Prior to admission to candidacy</td>
</tr>
<tr>
<td>Submission and approval of application for admission to candidacy</td>
<td>Doctoral Degree Committee and the School of Graduate Studies</td>
<td>At least one semester prior to graduation</td>
</tr>
<tr>
<td>Submission of application for graduation</td>
<td>School of Graduate Studies</td>
<td>According to the School of Graduate Studies Academic Calendar</td>
</tr>
<tr>
<td>Payment of graduate fees</td>
<td>Bursar’s Office</td>
<td>According to the School of Graduate Studies Academic Calendar</td>
</tr>
<tr>
<td>Submission of dissertation to the Doctoral Committee</td>
<td>Student</td>
<td>At least two weeks prior to the Defense of Dissertation Examination</td>
</tr>
<tr>
<td>Scheduling of Defense of Dissertation Examination</td>
<td>Student, Committee and Office of Graduate Admissions and Records</td>
<td>No later than three (3) weeks prior to Defense of Dissertation Examination</td>
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<tr>
<td>Defense of Dissertation Examination</td>
<td>Doctoral Committee</td>
<td>Scheduled in conjunction with the School of Graduate Studies Academic Calendar</td>
</tr>
<tr>
<td>Approval and Acceptance of final copy of Dissertation and Doctoral Forms</td>
<td>Doctoral Committee and the School of Graduate Studies</td>
<td>According to the School of Graduate Studies Academic Calendar</td>
</tr>
<tr>
<td>Removal of incomplete(s)</td>
<td>Instructor of the course</td>
<td>Not later than three (3) weeks prior to Commencement</td>
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</table>
MASTER OF SCIENCE – BIOINFORMATICS (M.S)

William Lupton, Ph.D
Chairperson, Computer Science
Calloway Hall 205
Tel: 443-885-4503
Email: lupton@morgan.edu

Program Objective
The Master of Science in Bioinformatics degree program is a multidisciplinary degree program. It involves faculty and courses from the Departments of Computer Science, Mathematics, Biology, Chemistry, and Physics within the School of Computer, Mathematics, and Natural Sciences. This relatively new and rapidly expanding discipline integrates computer, mathematical, statistical, chemical, and physical methods to solve computational problems in biology. The program is designed to offer students the broad-based interdisciplinary research training necessary for professional work in industry and continued post-graduate training in the field.

Admission Requirements
The candidates for admission to the program are expected to be graduates of computer science, mathematics, science, business, or engineering from an accredited institution with a GPA of at least 3.0. Students admitted to the program are required to take and pass recommended courses to remedy any deficiency in a discipline that serves as a foundation for the study of bioinformatics.

General Requirements
The required curriculum for completion of the program consists of a total of 38 credits, of which 15 credit hours will be taken from the Bioinformatics Core Courses, 12 credit hours of Scientific Core Courses, 6 credit hours from the Common Elective Courses from the Computer Science, Mathematics, Biology, Chemistry, and Physics disciplines, 2 credit hours of Thesis Guidance in Bioinformatics and 3 credit hours of Thesis Seminar in Bioinformatics. The cross-disciplinary nature of the curriculum offers great flexibility to graduate students toward their degree based on their personal scientific interests and background, and in the broad range of bioinformatics and computational biology course offerings available.

Bioinformatics Core Courses
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BIOI 511</td>
<td>Bioinformatics I</td>
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<tr>
<td>BIOI 512</td>
<td>Bioinformatics II</td>
<td>3</td>
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<tr>
<td>BIOI 513</td>
<td>Bioinformatics III</td>
<td>3</td>
</tr>
<tr>
<td>BIOI 521</td>
<td>Bioinformatics Tools and Databases</td>
<td>3</td>
</tr>
<tr>
<td>BIOI 591</td>
<td>Current Topics in Bioinformatics</td>
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</table>

Scientific Core Courses
<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>COMP 531</td>
<td>Bioprogramming</td>
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<tr>
<td>COMP 541</td>
<td>Scientific Visualization</td>
<td>3</td>
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<tr>
<td>MATH 631</td>
<td>Biostatistics</td>
<td>3</td>
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<tr>
<td>MATH 553</td>
<td>Computational Mathematics</td>
<td>3</td>
</tr>
</tbody>
</table>

Common Elective Courses
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOI 522</td>
<td>Bioalgorithms</td>
<td>3</td>
</tr>
<tr>
<td>BIOI 542</td>
<td>Biovisualization</td>
<td>3</td>
</tr>
<tr>
<td>BIOI 561</td>
<td>Modeling and Simulation in Bioinformatics</td>
<td>3</td>
</tr>
<tr>
<td>COSC 521</td>
<td>Algorithms</td>
<td>3</td>
</tr>
<tr>
<td>COSC 571</td>
<td>Software Agents and their Systems</td>
<td>3</td>
</tr>
<tr>
<td>COSC 572</td>
<td>Genetic Algorithms and Programming</td>
<td>3</td>
</tr>
<tr>
<td>MATH 514</td>
<td>Applied Combinatorics and Graph Theory</td>
<td>3</td>
</tr>
<tr>
<td>MATH 561</td>
<td>Mathematical Modeling</td>
<td>3</td>
</tr>
</tbody>
</table>

For unconditional admission applicants must have also earned a minimum undergraduate academic average of 3.0 in an undergraduate major in bioinformatics, computer science, mathematics, biology, chemistry, physics, or comprehensive science.
BIOI 511 Bioinformatics I
Three Hours; 3 Credits
The course introduces principles, concepts, methods, techniques, algorithms, tools, and strategies to transform and process the masses of information from biological experiments focusing particularly on sequence data. It covers topics as: DNA and protein sequence alignment and analysis, sequence analysis software, database searching, database search heuristic algorithms, sequence alignment dynamic programming algorithms, RNA folding, and multiple sequence alignment and analysis.

BIOI 512 Bioinformatics II
Three Hours; 3 Credits
The course introduces principles, concepts, methods, techniques, algorithms, tools, and strategies of structural bioinformatics. It covers topics such as: protein structure, DNA and RNA structure, macromolecular structure determination techniques, data representation and databases, comparative features, structure-function assignment, protein interactions, and protein structure predictions.

BIOI 513 Bioinformatics III
Three Hours; 3 Credits
The course is an advanced treatment of various research topics introduced in BIOI.511 and BIOI.512. Bioinformatics techniques applied in functional and comparative genomics such as mRNA expression arrays, studying functions of nonprotein-coding sequences, proteomic techniques to measure the population of proteins in the cell – including mass spectrometry and protein-based arrays will be covered. The course will also provide an in-depth survey of research involving the applicability and limitations of these approaches.

BIOI 514 Bioinformatics Tools and Databases
Three Hours; 3 Credits
The course introduces bioinformatics tools and databases for processing and management biological data available through the World Wide Web. It covers topics as: bioinformatics tools and databases at the National Center for Biotechnology Information, protein resources at the European Molecular Biology Laboratory, and Biology Workbench at the San Diego Supercomputer Center.

BIOI 542 Biovisualization
Three Hours; 3 Credits
The course introduces principles, concepts, methods, techniques, algorithms, tools, and strategies for biovisualization (visualization of biological data) using different visualization software tools. It covers topics such as: volume rendering, visualizing vector data, virtual environments, visualization tools, applications in bioinformatics, and visualization challenges.

BIOI 591 Current Topics in Bioinformatics
Three Hours; 3 Credits
This course provides an overview of current research and future directions in bioinformatics. The bulk of this course will deal with disseminating and presenting the most recent articles from various journals relevant to bioinformatics research.

BIOI 797 Thesis Guidance in Bioinformatics
Two Hours; 2 Credits
This course provides the guidance and details concerning research necessary for posing and solving a thesis problem, writing a thesis, and publishing the thesis results.

BIOI 799 Thesis Seminar in Bioinformatics
Three Hours; 3 Credits
This course is a seminar in bioinformatics. It covers new trends, topics, and state-of-the-art tools in bioinformatics that are not covered by other courses. The focus of this course will be on new/emerging areas of interest in bioinformatics.

Computer Science – Course Descriptions

COSC 531 Bioprogramming
Three Hours; 3 Credits
The course introduces bioprogramming languages Perl, object-oriented Perl, and BioPerl and presents how to program in bioinformatics. It covers topics as: data types, operators, control structures, functions, regular expressions, files and directories, references, report writing, object-oriented programming, classes, and utility programs for analysis and interpretation of biological structures and data.

COSC 541 Scientific Visualization
Three Hours; 3 Credits
The course introduces principles, concepts, methods, techniques, algorithms, tools and strategies for scientific visualization. It covers topics such as perception, image techniques and data acquisition, surface extraction, volume visualization, methods for time-varying data, vector visualization, information visualization, virtual reality, and computer animation.

COSC 572 Genetic Algorithms and Programming
Three Hours; 3 Credits
The course introduces principles, concepts, methods, techniques, tools, and strategies of genetic algorithms and programming. It focuses in depth on a small set of important and interesting topics particularly in machine learning, scientific modeling, and artificial life.
# MASTER OF ARTS – MATHEMATICS (M.A.)

**Gaston M. N'guérékata, Ph.D.**  
Chairperson, Mathematics  
Carnegie Hall, Room 251  
Tel: (443) 885-3964; Fax: (443) 885-8216  
E-mail: gnguerek@morgan.edu

## Program Objective

The Master of Arts degree in Mathematics is designed for qualified students who contemplate pursuing graduate work beyond the master degree and for qualified secondary school teachers who wish to improve their subject matter competence by earning a master’s degree in Mathematics.

## General Requirements

Candidates for the Master of Arts degree in Mathematics must complete a minimum of thirty (30) credit hours and submit an acceptable thesis. All candidates must pass a written comprehensive examination. This examination will deal more with comprehension of ideas and concepts than with taking inventory of manipulative skills.

### PROGRAM OF STUDY IN MATHEMATICS

<table>
<thead>
<tr>
<th>Required Courses (18 hours)</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 505-506 Abstract Algebra I, II</td>
<td>6</td>
</tr>
<tr>
<td>MATH 521-522 Real Analysis I, II</td>
<td>6</td>
</tr>
<tr>
<td>MATH 541 Point Set Topology I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 799 Thesis Seminar</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credit Hours</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

### Elective Courses (12)

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 501 Set Theory and Related Topics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 507 Ordinary Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>MATH 512 Probability and Statistics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 514 Applied Combinatorics and Graph Theory</td>
<td>3</td>
</tr>
<tr>
<td>MATH 517 Foundation of Geometry</td>
<td>3</td>
</tr>
<tr>
<td>MATH 518 Modern Geometry</td>
<td>3</td>
</tr>
<tr>
<td>MATH 523 Measure Theory</td>
<td>3</td>
</tr>
<tr>
<td>MATH 525 Theory of Numbers</td>
<td>3</td>
</tr>
<tr>
<td>MATH 527 Complex Analysis</td>
<td>3</td>
</tr>
<tr>
<td>MATH 542 Point Set Topology II</td>
<td>3</td>
</tr>
<tr>
<td>MATH 551, 552 Algorithms and Computations I,II</td>
<td>6</td>
</tr>
<tr>
<td>MATH 553 Computational Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 555 Introduction to Functional Analysis</td>
<td>3</td>
</tr>
<tr>
<td>MATH 557 Foundation of Harmonic Analysis</td>
<td>3</td>
</tr>
<tr>
<td>MATH 559 Numerical Analysis</td>
<td>3</td>
</tr>
<tr>
<td>MATH 561 Mathematical Modeling</td>
<td>3</td>
</tr>
<tr>
<td>MATH 575 Introduction to Partial Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>MATH 631 Biostatistics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 632 Advanced Biostatistics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 633 Applied Regression and Correlation Analysis</td>
<td>3</td>
</tr>
<tr>
<td>MATH 778, 779 Supervised Research</td>
<td>6</td>
</tr>
<tr>
<td>MATH 797 Thesis Guidance</td>
<td>3</td>
</tr>
</tbody>
</table>
MASTER OF SCIENCE IN SCIENCE (M.S.)

Objective
The Master of Science in Science degree program offers interdisciplinary training in the major area of biology, chemistry, physics, and general science, with provisions for greater in-depth preparation in one of these disciplines. The program offers both classroom and laboratory experience and is specifically designed to develop and extend the skill and competency of teachers of science in the secondary school.

Admission to Program
For unconditional admission applicants must have also earned a minimum undergraduate academic average of 3.0 in an undergraduate major in biology, chemistry, physics, or comprehensive science. The pattern of courses must include at least eight credit hours in biology, eight in chemistry, six in mathematics (including college algebra and trigonometry) and eight in physics. Applicants who have completed courses that are substantially equivalent to the minimum stated above may use them to qualify for admission.

For conditional admission applicants must have also earned a minimum undergraduate academic average of 2.5 in their major area of study, and in undergraduate course requirements the same as those listed for unconditional admission above.

General Degree Requirements
All candidates for the degree must complete a minimum of 33 semester hours, and elect a major area of concentration in biology, chemistry, physics or general science. All candidates must pass a written departmental comprehensive examination.

Program of Study
The program requires the completion of a minimum of 33 credit hours as listed below. Each student will elect a major in one of the following areas of specialty: biology, chemistry, physics, or general science.

Required of all students (15 credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 509</td>
<td>Mathematical Methods of Analysis in Science</td>
<td>3</td>
</tr>
<tr>
<td>SCIE 521</td>
<td>Earth &amp; Planetary Science</td>
<td>3</td>
</tr>
<tr>
<td>SCIE 553</td>
<td>Science in the Secondary School Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>788 – 789</td>
<td>Supervised Research in the Area of Specialty</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total Credit Hours</td>
<td>15</td>
</tr>
</tbody>
</table>

Courses currently available for completion of the program are in the following listing:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 521-522</td>
<td>Bioecology/Advanced Research Techniques</td>
<td>6</td>
</tr>
<tr>
<td>BIOL 525-526</td>
<td>Cellular Biology/Molecular Biology</td>
<td>6</td>
</tr>
<tr>
<td>CHEM 531</td>
<td>Advanced Analytical Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 541</td>
<td>Chemical Kinetics</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 551</td>
<td>Advanced Organic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 561</td>
<td>Advanced Inorganic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 571</td>
<td>Advanced Biochemistry</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 521-522</td>
<td>Advanced Physics</td>
<td>6</td>
</tr>
<tr>
<td>PHYS 523-524</td>
<td>Modern Physics</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Total Credit Hours</td>
<td>15</td>
</tr>
</tbody>
</table>

The student may choose to concentrate studies in one of the following four areas of emphasis according to his or her interest:
· General Science
· Biology
· Chemistry
· Physics

The student interested in studying General Science will take 6 hours of Biology, 6 hours of Chemistry, and 6 hours of Physics. The choice of a particular course will be determined by the interest of the student in conjunction with faculty counseling.
The student interested in studying Biology will take 6 hours of Chemistry or Physics and 12 hours of Biology.

The student interested in developing Chemistry as the major emphasis will take 6 hours of Physics and 12 hours of Chemistry.

The student interested in developing Physics as the major emphasis will take 6 hours of Chemistry and 12 hours of Physics.
MASTER OF SCIENCE IN SCIENCE (BIOLOGY) (M.S)

Arthur Williams, Ph.D.
Chairperson, Biology
Spencer Hall, Room G-12
Tel: (443) 885-3070; Fax: (443) 885-8285
E-mail: awillia5@jewel.morgan.edu

Objective
The Master of Science in Science degree in Biology is intended for students interested in pursuing advanced graduate work in Biology and related fields. The objective of this program is to produce well-grounded graduates in the advanced concepts and techniques in Biology. The program emphasizes a strong background in current areas of biology and biological research. It requires biology core and elective courses and a research thesis based on individual laboratory research. The research component will expand the competency of students in biology and advance their careers as scientists in the field. To this end, the course of study for students in this program is individually planned coupled with carefully directed laboratory or theoretical research programs.

Admission Requirements
Candidates are expected to also have a baccalaureate degree in Biology, or related discipline, from an accredited institution. GRE scores on the GRE General and Subject (Biology) tests are essential for Teaching Assistant (TA) or fellowship consideration. Evidence of research capability should be included. International students must submit a TOEFL score of at least 550.

General Requirements
Candidates are required to complete a total of 33 credit hours as follows: 23 credit hours of courses, 8 credit hours of research and 2 credit hours of seminar. During the first year, students must select a Thesis Committee, which must consist of the student’s major professor plus at least three other faculty members in the field. All candidates must pass an approved written comprehensive examination and submit a written thesis proposal.

PROGRAM OF STUDY
Requirements for Master of Science in Science (Biology)

COURSES CREDITS
BIOL 520 Biomolecular Structure 3
BIOL 522 Advances In Research Techniques 3
BIOL 523 Seminar Topics in Modern Biology & Environmental Sciences 1x2 4
BIOL 525 Cellular Biology 3
BIOL 526 Molecular Biology 3
BIOL 788-789 Supervised Research in the Area of Specialty 8
BIOL 797 Thesis Guidance 2
BIOL 799 Thesis Seminar 3

Other Suggested Courses in Biology include:
BIOL 521 Biocology 3
BIOL 524 Advanced Molecular Genetics 3
BIOL 527 Microbiology of Emerging Pathogens 3
BIOL 528 Immunobiology 3
BIOL 532 Toxicology 3
BIOL 533 Environmental Toxicology 3
BIOL 536 Molecular & Behavioral Neuroscience 3
BIOL 540 Computational Biology/Bioinformatics 3
BIOL 601 Molecular Biotechnology 3
MASTER OF SCIENCE IN SCIENCE (CHEMISTRY) (M.S.)

Alvin P. Kennedy, Sr., Ph.D.
Chairperson, Chemistry
Spencer Hall, Room 318
Tel: (443) 885-3115; Fax: (443) 885-8286
E-mail: akennedy@morgan.edu

Program Objective
The Master of Science in Science degree is a Professional Chemistry degree program for students interested in pursuing professional careers and advanced graduate work in chemistry and its allied fields. The objective of this professional track is to produce well-grounded graduates in the advanced concepts and techniques in chemistry. The graduate will be expected to make a positive contribution to the overall chemical knowledge. To this end, a course of study for students in this program is individually planned coupled with carefully directed laboratory or theoretical research programs.

Admission Requirements
All applicants with a bachelors degree in chemistry and a major GPA of 3.0 or better from an accredited institution are eligible for admission. In some cases, candidates with a GPA of less than 3.0 may be admitted on probationary status. Such candidates would be required to take and pass recommended courses with grades of B or better to remedy their deficiencies. The deficiency remediation must be completed within one academic year.

General Requirements
Candidates in this program shall be required to complete a total of 33 credit hours as follows: 23 credit hours of courses, 8 credit hours of research and 2 credit hours of seminar. The required courses are as follows:

Requirements for Master of Science in Science (Chemistry)

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 531</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 541/603</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 551</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 561</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 581</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 788,789</td>
<td>8</td>
</tr>
<tr>
<td>CHEM 790</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 797</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 799</td>
<td>3</td>
</tr>
<tr>
<td>Additional courses from specialty area</td>
<td></td>
</tr>
</tbody>
</table>
MASTER OF SCIENCE IN SCIENCE (PHYSICS) (M.S.)

Dereje Seifu, Ph.D.
Graduate Coordinator of Physics
Dixon Science Research Center, Room 008
Tel: (443) 885-4560; Fax: (443) 885-8288
Email: dseifu@morgan.edu

Objective
The Physics Department at Morgan State University offers the Master of Science degree in Science-Physics for students interested in pursuing professional careers and advanced graduate work in physics and its allied fields. The objective of this program is to produce well-grounded graduates in the advanced concepts and techniques in physics. The graduate will be expected to make a positive contribution to the overall knowledge in physics. To this end, a course of study for students in this program is individually planned coupled with carefully directed laboratory or theoretical research programs. It requires physics elective courses and a research thesis based upon individual laboratory in the field of physics and materials sciences.

Admission Requirement
The candidates for admission into this program are also expected to be graduates of physics from an accredited institution with a GPA of 3.0 or better. Students with an undergraduate degree in mathematics, engineering or other science fields may be admitted on a probationary status. They would be expected to take and pass recommended courses to remedy their deficiencies.

General Requirements
All candidates must pass a written departmental comprehensive examination in their specific area of concentration. Candidates in this program shall be required to complete a total of 33 credit hours as follows: 23 credit hours of courses, 8 credit hours of research and 2 credit hours of seminar. The required courses are as follows:

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 500</td>
<td></td>
</tr>
<tr>
<td>PHYS 511</td>
<td></td>
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<tr>
<td>PHYS 528</td>
<td></td>
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<td>PHYS 529</td>
<td></td>
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<td>PHYS 531</td>
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<tr>
<td>PHYS 788,789</td>
<td></td>
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<td>PHYS 797</td>
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<td>PHYS 799</td>
<td></td>
</tr>
<tr>
<td>Additional courses from specialty area</td>
<td>3</td>
</tr>
</tbody>
</table>

Other Suggested Courses in Physics Include:

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EASC 521</td>
<td></td>
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<tr>
<td>EASC 524</td>
<td></td>
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<tr>
<td>PHYS 523</td>
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<td>PHYS 527</td>
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<tr>
<td>PHYS 530</td>
<td></td>
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<tr>
<td>First Year</td>
<td>Second Semester</td>
</tr>
<tr>
<td>------------</td>
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</tr>
<tr>
<td><strong>First Semester</strong></td>
<td><strong>Second Semester</strong></td>
</tr>
<tr>
<td><em>PHYS 523 Nuclear &amp; Radioactivity</em></td>
<td>3</td>
</tr>
<tr>
<td>PHYS 525 Comp. Physics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 527 Acoustics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 788 Research</td>
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<td>PHYS 790 Seminar</td>
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<table>
<thead>
<tr>
<th>Second Year</th>
<th>Second Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td><strong>Second Semester</strong></td>
</tr>
<tr>
<td>EASC 521 Earth &amp; Plntry, Sci</td>
<td>3</td>
</tr>
<tr>
<td><em>PHYS 528 Quantum Mechanics</em></td>
<td>3</td>
</tr>
<tr>
<td><em>PHYS 500 Math Physics</em></td>
<td>3</td>
</tr>
<tr>
<td><em>PHYS 788 Research</em></td>
<td>3</td>
</tr>
<tr>
<td>13</td>
<td>13</td>
</tr>
</tbody>
</table>

* Required Courses
SCHOOL OF COMPUTER, MATHEMATICAL & NATURAL SCIENCES

COURSE DESCRIPTIONS

DEPARTMENT OF BIOLOGY

BIOL 520  Biomolecular Structure
Three Hours: 3 Credits
Covers topics in protein structure and function, enzyme kinetics and mechanisms of enzyme action, metabolism of carbohydrates, lipids, amino acids and nucleotides, bioenergetics and energy considerations in biochemistry, and analyzes various techniques and instrumentations used in biochemical studies.

BIOL 521  Bioecology
Three Hours: 3 Credits
This course is designed to develop an in-depth understanding of the major principles connected with the interrelationships of organisms and organisms and their environment. The major chemical, physical and biotic factors of the environment will be analyzed for their influence on the distributor and functional processes of plant and animal communities.

BIOL 522  Advances in Research Techniques
Three Hours: 3 Credits
This course provides the first-year graduate student with an intensive hands-on approach to modern techniques and methodologies of biomedical research. Students will be introduced to theories and practices of qualitative and quantitative analysis of proteins, gel electrophoresis, enzyme assays, column chromatography, nucleic acid “blot-and-probe” techniques, differential centrifugation, cell culturing, and radioisotope methodology.

BIOL 523  Seminar Topics in Modern Biology & Environmental Sciences
Two Hours: 2 Credits
This course explores in-depth reviews of modern scientific topics in biology and environmental sciences. It enables students engaged in this course to review the literature and provide discussions on the topics.

BIOL 524  Advance Molecular Genetics
Three Hours: 3 Credits
This is a lecture course designed as a logical extension of the Introductory Genetics and Population Biology courses encountered in the undergraduate curriculum. The relatedness of life forms through the central dogma concept is the fundamental driving force in explaining the how and why of studying simpler organisms as a prelude to an understanding of the more complex systems. This course is therefore designed to continually enhance the knowledge base in the ever-changing field of molecular genetics both as to theory and practice.

BIOL 525  Cellular Biology
Three Hours: 3 Credits
This course is designed to integrate basic concepts of cellular biology with general topics in the areas of biochemistry, genetics and molecular biology. The major topics of discussions will be: structure, function and biogenesis of macromolecules and cellular organelles, cell membrane and the cytoskeleton, membrane transport mechanisms, cell surface and intracellular communication, energy requirements for cellular activities, synthesis and sorting, distribution of specific organellar proteins and their major role in overall cellular function. Taken together, specific topics from these four major disciplines will provide the students with an understanding of how cells function. Also, the major experiments that led to the discovery of some of these important facts in cellular biology will be emphasized.

BIOL 526  Molecular Biology
Three Hours: 3 Credits
This is lecture course will provide students with the theoretical basis for appreciating and understanding the basic principles and methodologies of modern molecular biology through lectures and discussions of the current scientific literature and textbook assignments on selected topics in molecular biology. The course is designed to integrate basic concepts of molecular biology with fundamental topics in other areas of cellular biology, biochemistry, microbiology, and molecular genetics. Special emphasis will be given to topics covering the following themes: structure and properties of nucleic acids; DNA replication, repair, and recombination; molecular biology of gene expression and its regulation in prokaryotes and eukaryotes; protein structure and translational...
control; and molecular biotechnology with an emphasis on recombinant DNA technology, protein engineering, vaccines and therapeutics, immunodiagnostics, and genetic engineering of mammalian and plant organisms.

BIOL 527 Microbiology of Emerging Pathogens
Three Hours: 3 Credits
This is a lecture course that will address the microbiology of emerging pathogens with the hope of understanding the factors involved in disease emergence, prevention, the public health impact, and control. The course will cover selective pathogen topics such as Hantavirus, emerging foodborne pathogens, HIV/AIDS and multidrug resistant tuberculosis among high-risk group's etc. The course will follow instruction and discussion of recent publications on particular topics.

BIOL 528 Immunobiology
Three Hours: 3 Credits
This course will emphasize the significant new advances in the field of immunology, immunobiology and immunotherapy. This multidisciplinary field of study integrates molecular biology, cell biology and physiology. Students will acquire an in-depth understanding of basic research in immunology that is applicable to the diagnosis and the development of treatments for immunodeficiencies, autoimmune disease, cancer and AIDS. The course will also emphasize new biotechnological strategies for the development of novel vaccines.

BIOL 531 Environmental Science
Three Hours: 3 Credits
This course is designed to provide students with an in-depth understanding of fundamental scientific principles and concepts necessary for a better understanding of environmental science, environmental problems, causes and solutions. Emphasis is placed on urban environmental problems, issues and solutions together with the impact of man on the environment. Prerequisites: BIOL 521.

BIOL 536 Molecular and Behavioral Neuroscience
Three Hours: 3 Credits
This course will investigate the fundamental concepts of the nervous system, brain, and behavior by emphasizing the interrelationships between neurobiology and cognitive science. Part of the course will focus on the nervous system structure, function and development and will be used in understanding the biological basis of learning, memory, and behavior in both normal and altered states. Current research, such as the latest discoveries in the genetics and molecular biology of behavior and the social implications of these discoveries will be used in graduate level discussions and presentations. Critical thinking and analysis of relevant scientific literature will also be emphasized.

BIOL 540 Computational Biology/Bioinformatics
Three Hours: 3 Credits
The course will facilitate the use of computational tools in studying diverse biological problems including developing population growth and prey models, utilizing statistical models in explaining biological concepts, analyzing fundamental problems of DNA and protein structure and function, performing biological database searches and information retrieval, and providing real time three-dimensional images and high resolution graphics displays.

BIOL 601 Molecular Biotechnology
Six Hours: 4 Credits
This is predominantly a laboratory course with direct hands-on laboratory experiences using state-of-the-art techniques and experimental approaches in the production of heterologous proteins in prokaryotic and eukaryotic cells utilizing bacterial (prokaryotic) as well as insect, yeast, and mammalian (eukaryotic) expression vectors. Students will use molecular biology approaches, including techniques in recombinant DNA and genetic engineering technology to clone, express, affinity-purify, and characterize the recombinant proteins produced in the prokaryotic and eukaryotic host cells. The theoretical component of the course introduces the student to the fundamental principles, applications, strategies, and societal concerns of Molecular Biotechnology, and will facilitate an understanding of important theoretical concepts which will be complemented by the methodologies and experimental strategies covered in the laboratory portion of the course.

BIOL 602 Environmental Immunotoxicology
Three Hours: 3 Credits
Studies the adverse effects of environmental chemicals and toxins on the immune system. The course will examine the influence of environmental or toxic agents on immune function and the cellular and molecular mechanisms that lead to alterations in the immune response.
BIOL 603  Marine and Aquatic Biology  
Four Hours: 4 Credits  
This course examines the broad and multidisciplinary approach to marine and aquatic life and the biological processes in shallow coastal waters and the open ocean. It examines and quantifies organismal physiological response to the abiotic and biotic environment. Aspects of population and community structure, reproduction and larval biological reproduction systems are also examined. Prerequisite: Bioecology, Basic Statistics.

BIOL 604  Ecosystem Analysis  
Four Hours: 4 Credits  
This course exposes students to ecosystem-level questions; demonstrates field-data collection and laboratory analysis; emphasizes data manipulation on microcomputers; and introduces professional data presentation techniques (graphing, transparencies, slides, multi-media, etc.). Some student projects are expected to generate large enough data sets to test hypothesis and develop publishable conclusions. Class sessions comprise lecture and field/ laboratory components. Prerequisite: core courses.

BIOL 606  Environmental Toxicology  
Three Hours: 3 Credits  
Covers relevant problems in environmental toxicology, with an emphasis on the nature, distribution and effects of environmental toxicants; exposure and dose-response characterizations, and risk assessment and risk management will be covered.

BIOL 609  Environmental Microbiology  
Three Hours: 3 Credits  
Covers current topics in selected areas of environmental microbiology, with an emphasis on the genetics and pathophysiology of microorganisms.

BIOL 610  Molecular Epidemiology of Infectious Diseases  
Three Hours: 3 Credits  
Application of molecular typing techniques to study of microbial pathogens to increase understanding of epidemiology of infectious diseases. Evaluation of methods used in outbreaks and epidemics reported in literature. Prerequisite: Advanced Cell & Molecular Biology.

BIOL 611  Food and Water Borne Diseases  
Three Hours: 3 Credits  
Study of identification and characteristics of chemicals and biological agents implicated in food and water borne disease outbreaks and conditions or circumstances by which food contamination occurs. Examination of food protection activities conducted by local and state government at the retail level. Principles and requirements of public water supply for protection of public health. Includes essential characteristics of water quality and sources, water treatment and distribution systems with associated health hazards; public health, epidemiology, risk assessment; surveillance, regulatory needs to assure safe public water supplies. Prerequisite: Environmental Sciences.

BIOL 612  Advanced Environmental Health  
Three Hours: 3 Credits  
Examines health issues, scientific understanding of causes, and possible future approaches to control of the major environmental health problems in industrialized and developing countries. Topics include how the body reacts to environmental pollutants; physical, chemical, and biological agents of environmental contamination; vectors for dissemination (air, water, soil); solid and hazardous waste; susceptible populations; biomarkers and risk analysis; the scientific basis for policy decisions; and emerging global environmental health problems.

BIOL 619  Business Concepts for Environmental Managers  
Three Hours: 3 Credits  
The course offers environmental managers a basic understanding of accounting systems-to enable them to interpret financial data in corporate and governmental settings, to integrate traditional business concepts with those of sustainable environmental management, and to recognize the role of environmental management among the multiple interests within business negotiations. The first part of the course develops skill in financial accounting, and this knowledge is then applied to areas in environmental financial management, including budgeting, project finance, and business development and strategy.
BIOL 620  Environmental Genetics  
Three Hours: 3 Credits  
Studies the effects of exposure to various environmental chemicals and carcinogens on genetic diseases. The course examines the alteration of the genetic make-up of model organisms by environmental chemicals and other carcinogens, and the influence of such environmental factors on the alteration of target gene expression and development of carcinogenesis.

BIOL 624  Environmental Biotechnology  
Three Hours: 3 Credits  
The course examines the use of biotechnology techniques and methods for the analysis and solution of environmental problems. Areas of particular interest include the use of novel microorganisms for applications in the removal of pollutants, toxic chemicals, and hazardous wastes from the environment.

BIOL 625  Seminar Topics in Modern Biology and Environmental Sciences  
Two Hours: 1 Credit  
Gives an in-depth review of modern topics in the biological and environmental science fields. It enables students to review the research literature and provide discussions on the topics. These seminars emphasize contextual and integrated understanding, analysis and synthesis, conflicts and ethical issues, enhanced communication and teamwork.

BIOL 626  Environmental Physiology of Plants  
Three Hours: 3 Credits  
The course examines the regulation of plant growth and development, nutrition, and the effects of environmental stress, chemicals, and pollutants on the physiology and development of crop plants of economic importance.

BIOL 627  Molecular Toxicology of Diseases  
Three Hours: 3 Credits  
Advanced discussion of molecular mechanisms whereby chemical, physical, and biological agents produce harmful effects on biological tissues. Prerequisite: Advanced Cell and Molecular Biology.

BIOL 628  Environmental Carcinogenesis  
Three Hours: 3 Credits  
Biochemical and molecular basis of carcinogenesis induced by chemical and physical agents in the environment, including detailed discussion of multi-stage process of carcinogenesis, mechanisms of action of specific chemical and physical carcinogens; current approaches to identification of carcinogens, and chemoprevention strategies.

BIOL 629  Developmental Neurotoxicology  
Three Hours: 3 Credits  
This course will introduce students to the full spectrum of environmental effects on the developing nervous system. This includes pre-and postnatal effects of toxicants on the developing nervous system along with the discussion of physical, psychological and sociological constraints of nervous system development. Special emphasis will be given to effects on the development of the mammalian Central Nervous System [CNS], however, Peripheral Nervous System [PNS] effects and other vertebrate models will be discussed where and when relevant.

BIOL 630  A Seminar I: Global Environment and Public Health  
Two Hours: 1 Credit  
Explores the impact of development and industrialization on the global environment, such as disease transmission, desertification, deforestation, collapse of marine fisheries, declining agricultural production, and biodiversity loss. Provides an overview of scientific and policy issues surrounding global environmental health issues.

BIOL 630B  Seminar II: Reproductive and Developmental Toxicology  
Two Hours: 1 Credit  
Investigates chemicals that can induce adverse reproductive and developmental outcomes. Discussion topics include identification and characterization of specific classes of toxic agents, mechanisms of action of these agents at the molecular and cellular level, and risk assessment and regulatory issues. Prerequisite: Advanced Cell and Molecular Biology.

BIOL 630C  Seminar III: Biotechnology, Bioinformatics, and Ecogenetics  
Two Hours: 1 Credit  
Methodologies currently used for characterization, storage, and retrieval of genetic information relevant to gene-environment in-
teractions that contribute to diseases of public health importance. Working knowledge of molecular genotyping and phenotyping, genomics, and bioinformatics related to genetic testing provided. Prerequisite: Advanced Cell & Molecular Biology.

BIOL 630D  Seminar IV: Neuroepidemiology and Environmental Risk Factors
Two Hours: 1 Credit
Focus on neurologic diseases and etiology. Presentation of descriptive epidemiology, clinical features, and risk factors, including stroke, Parkinson's disease, Alzheimer's disease, AIDS, multiple sclerosis, and other disorders. Prerequisite: Advanced Environmental Sciences.

BIOL 631  Bioethics and Communications
Three Hours: 3 Credits
Students in this course analyze, discuss and write on traditional philosophical theories regarding the nature of the moral good. They then apply these theories to critical issues and selected cases involving experiments with human subjects, organ transplantation, in vitro fertilization, the use of animals in research, the collection and publication of research data, peer review, conflicts of interest, and other topics of current concern. The course also emphasizes how to write scientific papers for peer-reviewed journals, for in-house scientific progress reports, for lay audiences, and for grant applications. Approaches to making formal oral presentations and posters are also presented. Class discussions center around writing and speaking skills and the author/speakers' responsibility to present accurate accounts of results, applications, and implications of their research. Students have weekly writing and reading assignments.

BIOL 632  Professional Communication and Research Conduct
Three Hours: 3 Credits
This class will prepare graduate students to be proficient in all major aspects of professional scientific communications. In addition ethical issues connected to the communication of research results and professional conduct will be discussed. Students are expected to complete assignments involving their own research results. This class will be most effective if taken during the students second year in the program, after significant research results have already been obtained.

BIOL 788-789  Supervised Research
Four Hours: 4 Credits each course
These are research courses designed to enable students to participate in research in the areas of their competence under the supervision of qualified faculty members. Students are required to submit oral presentations of research findings in seminars and to submit a written thesis report to the graduate faculty.

BIOL 797  Thesis Guidance
Two Hours: 2 Credits

BIOL 799  Thesis Seminar
Three Hours: 3 Credits

BIOL or CHEM 800-804  Supervised Doctoral Research
Three Hours: 3 Credits each course
These courses are designed to allow students to participate in doctoral research in areas of their choosing under the supervision of a research mentor and also to defend their thesis for the doctoral degree. Students are required to submit their research findings in a seminar topics series.

BIOL 997  Dissertation Guidance
Three Hours: 3 Credits

BIOL 998  Dissertation Seminar
Six Hours: 6 Credits
**DEPARTMENT OF CHEMISTRY**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Hours</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 531</td>
<td>Advanced Analytical Chemistry I</td>
<td>3</td>
<td>3</td>
<td>The course covers the principles and methods at advanced level in modern chemical analysis. Topics will include separation techniques, GC, HPLC, Spectrometry, lasers and electrophoresis. Prerequisite: CHEM 314.</td>
</tr>
<tr>
<td>CHEM 532</td>
<td>Advanced Analytical Chemistry II</td>
<td>3</td>
<td>3</td>
<td>Advanced topics in Chemical equilibrium and kinetics in analytical chemistry, Thermal and Electrochemical methods will also be covered in this course. Prerequisite: CHEM 314.</td>
</tr>
<tr>
<td>CHEM 533</td>
<td>Statistical Methods in Analytical Chemistry</td>
<td>3</td>
<td>3</td>
<td>This course covers a variety of computer-aided models to treat and interpret laboratory experimental data. Topics to be covered include: Errors in measurement, bi and multivariate data analysis, analysis of variation (ANOVA) and ancillary techniques including Monte Carlo simulations. Prerequisite: CHEM 314 or equivalent.</td>
</tr>
<tr>
<td>CHEM 534</td>
<td>Advanced Analytical Chemistry III</td>
<td>3</td>
<td>3</td>
<td>Selected topics in electronics and computer applications in analytical chemistry. Signal processing, computer-aided analysis, electronic gates in signal processing in analytical chemistry. Prerequisite: CHEM 314.</td>
</tr>
<tr>
<td>CHEM 541</td>
<td>Chemical Kinetics</td>
<td>3</td>
<td>3</td>
<td>This course will cover the fundamental understanding of chemical reaction rates and mechanisms, orders of reaction and their application to biological systems, thermochemical kinetics, catalysis and fast reactions in gases and condensed phases. Prerequisite: CHEM 308.</td>
</tr>
<tr>
<td>CHEM 542</td>
<td>Colloids and Surface Chemistry</td>
<td>3</td>
<td>3</td>
<td>Discussion of colloid materials and their applications, surfaces, interface and reactivity on material surfaces and interphases. Stability of colloids, rheology, emulsions and foams. Prerequisite: CHEM 308.</td>
</tr>
<tr>
<td>CHEM 543</td>
<td>Chemical Thermodynamics</td>
<td>3</td>
<td>3</td>
<td>Thermodynamics and its applications; solutions and phase equilibria for one and multicomponent systems, equilibrium considerations in thermodynamics. Prerequisite: CHEM 307.</td>
</tr>
<tr>
<td>CHEM 544</td>
<td>Molecular Spectroscopy</td>
<td>3</td>
<td>3</td>
<td>This course deals with chemical structures at the atomic and molecular levels. It uses quantum mechanical principles and the accompanying symmetry and molecular point groups methodology to understand the fundamental basis of the interaction of electromagnetic radiation with matter and the interpretation of the resulting atomic and molecular spectra and their relationship to chemical reactivity. Prerequisites: CHEM 308 and 407.</td>
</tr>
<tr>
<td>CHEM 545</td>
<td>Special Topics in Analytical/Physical Chemistry</td>
<td>2</td>
<td>2</td>
<td>Special topics course in analytical/physical chemistry, which may be taken as an independent course by graduate students with concentration in analytical or physical chemistry. It covers current/frontier areas in analytical or physical chemistry, which may include electrochemistry, separation techniques, quantum mechanical treatment of molecules and structural determination. Prerequisite: Graduate Standing with consent of Instructor.</td>
</tr>
</tbody>
</table>
CHEM 546  Quantum Chemistry  
Three Hours: 3 Credits  
Rigorous study of the basic tenets of quantum mechanics as applied to chemical systems; variational and perturbation theory, Hartree-Fock and Franck-Condon principle, the electronic structure of atoms and molecules and their energy systems. Prerequisite: CHEM 308 and CHEM 407.

CHEM 547  Computational Chemistry  
Three Hours: 3 Credits  
Modern theoretical (classical and quantum) methods used in the study of molecular structure, bonding and reactivity. Determination of molecular spectra, relationship to experimental techniques and concepts of practical applications. Prerequisite: CHEM 308, CHEM 407 and COSC 237.

CHEM 551  Advanced Organic Chemistry  
Three Hours: 3 Credits  
Emphasis will be on the structure, synthesis and bonding in organic compounds, reaction mechanisms (ionic, free radical and concerted). Prerequisite: CHEM 204, 408.

CHEM 552  Organic Synthesis  
Three Hours: 3 Credits  
This course covers principles of reactions leading to carbon-carbon formation, functional group transformation, protecting groups and masked groups introduction. Strategies of skeletal structures of main classes of biologically interesting compounds will be covered. Prerequisite: CHEM 204, 408.

CHEM 553  Polymer Chemistry  
Three Hours: 3 Credits  
Principles of structural and physical properties of polymers, copolymers and block copolymers, characterization, degradation and stabilization of polymeric materials. Prerequisite: CHEM 204, 408.

CHEM 555  Natural Products Chemistry  
Three Hours: 3 Credits  
This course is designed to provide the students an understanding of structure, classes, biosynthesis, biological significance, and reactions of major classes of natural products such as carbohydrates, terpenoids, fatty acids, amino acids, antibiotics, and alkaloids. Recent synthetic strategies of natural products will be covered.

CHEM 561  Advanced Inorganic Chemistry  
Three Hours: 3 Credits  
Principles of chemical bonding in metals and nonmetals, ligand field theory, applications of group theory to chemical bonding, inorganic reaction mechanism. Prerequisite: CHEM 312, 309.

CHEM 562  Organometallic Chemistry  
Three Hours: 3 Credits  
The principles and chemistry of compounds containing carbon-metal bonds, their synthesis and reaction mechanisms. Prerequisite: CHEM 312.

CHEM 563  Bioinorganic Chemistry  
Three Hours: 3 Credits  
Structure and bonding of inorganic material with biological systems. Functional relationship and reactions. Prerequisite: CHEM 312 and CHEM 204.
CHEM 565  Special Topics in Inorganic/Organic Chemistry or Biochemistry
Two Hours: 2 Credits
Special topics course in inorganic, organic or biochemistry, which may be taken as an independent course. It covers current/frontier areas in inorganic, organic or biochemistry which may include specific areas in transition metals and non-metal chemistry, application of group theory to reaction mechanisms, trends in stereochemical synthesis, pericyclic reactions, linear free energy relationship in organic chemistry, proteins and their structure-activity relationship, nucleic acid and their interactions with other biomolecules and their relationship to biomedical technology. Prerequisite: Graduate standing with consent of Instructor.

CHEM 571  Advanced Biochemistry
Three Hours: 3 Credits
Principles and chemistry of living matter, their metabolism and energetic transformations, lipid structure and membranes. Prerequisite: Chem. 304.

CHEM 572  Enzymology
Three Hours: 3 Credits
Structure and functions of enzymes, enzyme kinetics, competitive, noncompetitive and cooperative binding of substrates to enzymes, reversible and irreversible binding of substrates to enzymes. Prerequisite: CHEM 304, 571.

CHEM 573  Protein and Amino Acids
Three Hours: 3 Credits
Advanced study of proteins, their building blocks and structure. Function and chemistry of amino acids and proteins, synthesis and purification. Prerequisite: CHEM 304 and CHEM 571.

CHEM 581  Advanced Techniques in Chemistry
Four Hours: 4 Credits
Topics to be covered include modern synthetic methods in inorganic and organic chemistry, qualitative and quantitative analysis of reaction products using absorptiometric, fluorometric, electrochemical, separation and various other optical techniques. This is a hand on course that emphasizes the proficiency of students in the general research techniques/instrument usage in chemical sciences. Prerequisite: CHEM 314, 312, and 408.

CHEM 600  Advances in Biochemistry
Three Hours: 3 Credits
Rigorous treatment of molecules of biological importance, their fundamental applications to the understanding of human function and the environmental effects on their activity. Topics covered include the general structure, function and energetics of proteins, enzymes, carbohydrates and the nucleic acids with emphasis on their utilization by living organisms, their impact on environment and other recent health related applications. Prerequisites: CHEM 570/573 or Consent of Instructor.

CHEM 601  Environmental Chemistry
Three Hours: 3 Credits
This environmental chemistry course is a course designed to introduce students to the importance of chemistry in solving the myriad of environmental problems in the universe — the atmosphere, biosphere, geosphere, hydrosphere and the anthrosphere. Most of the pollutants are man-made during the normal cause of daily activities. Environmental chemistry studies the production of pollutants, their distribution in the environment, overall health effects and their remediation using chemical knowledge and its attendant techniques. Prerequisite: CHEM 204, MATH 114 or equivalent, CHEM 207 or permission of the Instructor.

CHEM 602  Pollutants in the Environment
Three Hours: 3 Credits
This course involves a rigorous treatment of materials and particulates that contribute to environmental hazards. Their origin and production will be covered in great depth. Rigorous quantitative methods of analysis and the general instrumental techniques will be covered. Prerequisite: CHEM 314 and/or CHEM 601.
CHEM 603  Physical Chemistry of Environmental Sciences  
Three Hours: 3 Credits  
This course will cover the importance of fundamental thermodynamics and kinetics in the treatment of environmental problems. Topics covered will include first, second and third laws of thermodynamics, phase transformations, free energy changes, equilibrium, transport phenomena, catalysis. Prerequisite: CHEM 308 or equivalent.

CHEM 604  Analytical Techniques in Environmental Chemistry  
Three Hours: 3 Credits  
This course covers the fundamental analytical methods used in the determination of both trace and bulk materials of chemical interest. Such techniques include errors in analysis and their propagation. Significance testing and ANOVA and Monte Carlo technique, optimization and computer simulations will be covered. Emphasis will be on the analysis of environmental pollutants. Prerequisite: CHEM 314 and/or CHEM 533.

CHEM 605  Atmospheric Chemistry  
Three Hours: 3 Credits  
Chemistry of the lower atmosphere (troposphere and stratosphere) including photochemistry, kinetics, thermodynamics, box modeling, biogeochemical cycles and measurement techniques for atmospheric pollutants; study of important impacts to the atmosphere which result from anthropogenic emissions of pollutants, including acid rain, the greenhouse effect, urban smog and stratospheric ozone depletion. Prerequisite: CHEM 602 and CHEM 603.

CHEM 788, 789  Supervised Research in Chemistry  
8 Credit Hours/4 Hours Each  
These are research courses designed to enable students to participate in research in the areas of their competence under the supervision of qualified faculty members. Students are required to submit oral presentations of research findings in seminars and to submit a written thesis report to the graduate faculty.

CHEM 790  Graduate Seminar  
Two Hours: 2 Credits  
This course explores in-depth reviews of modern scientific topics in chemistry. It enables students engaged in this course to review the literature and provide discussions on the topics.

CHEM 797  Thesis Guidance  
Two Hours: 2 Credits

CHEM 798  Thesis Research  
Three Hours: 3 Credits

CHEM 799  Thesis Seminar  
Three Hours: 3 Credits
DEPARTMENT OF PHYSICS

EASC 521   Earth and Planetary Science
Four Hours: 3 Credits
An overview of earth systems with emphasis on energy sources, earth system cycles, their interactions, and change with time. The solid earth, hydrosphere, and atmosphere will be studied using basic chemical and physical principles. The course will include lecture and laboratory. Prerequisite: Consent of instructor.

EASC 524   Planetary System Science
Four Hours: 3 Credits
A comprehensive study of planetary systems with emphasis on chemical and physical processes that formed and influenced members of the planetary system. In addition to the inner and outer solar system planets, the course will also discuss the primitive objects in the solar system comets, asteroids, and meteorites. Prerequisite: Consent of instructor.

PHYS 500   Mathematical Methods in Physics
Three Hours: 3 Credits
A study in matrices, tensors, linear transformations, complex variables, Fourier and Laplace transformations with applications to physics. Prerequisite: Consent of instructor.

PHYS 511   Classical Mechanics
Three Hours: 3 Credits
Lagrangian and Hamiltonian mechanics, normal modes, phase space, non-linear mechanics, numerical methods, stability. Prerequisite: Phys 500.

PHYS 523   Nuclear Physics & Radioactivity
Three Hours: 3 Credits
The course is structured to develop an in-depth understanding of nuclear physics and radioactivity. Topics considered are nuclei, radioactivity, and nuclear models. Prerequisite: Phys 528 or consent of instructor.

PHYS 524   Special Relativity & Elementary Particles
Three Hours: 3 Credits
The course is structured to develop an in-depth understanding of special relativity and elementary particles. Prerequisite: Phys 528 and consent of instructor.

PHYS 525   Computational Physics
Four Hours: 3 Credits
This course is designed to teach computer simulation of processes that occur in nature and visualization of scientific data using a computer. Prerequisite: Phys 500.

PHYS 526   Biophysics
Four Hours: 3 Credits
A survey of photobiology, bioenergetics, and physical methods currently used in biomedical research and practice, including microscopy, UV-visible spectrophotometry, diffraction, and physical separation techniques. Prerequisite: Consent of instructor.

PHYS 527   Fundamentals of Acoustics
Four Hours: 3 Credits
This course presents the physical and mathematical principles underlying the generation, transmission and reception of acoustic waves. Selected topics in architectural, environmental, industrial, and underwater applications are also considered. Prerequisite: Phys 500 or consent of instructor.
PHYS 528  Quantum Mechanics I  
Three Hours: 3 Credits  
Fundamental concepts in quantum mechanics, quantum dynamics and solutions of the Schroedinger equation, the representation of dynamical variables as operators and matrices, and symmetry in quantum mechanics. Prerequisite: Phys 500.

PHYS 529  Quantum Mechanics II  
Three Hours: 3 Credits  
Approximation methods in quantum mechanics, quantum mechanical effects of identical particles and scattering theory. Prerequisite: Phys 528.

PHYS 530  Solid State Physics  
Three Hours: 3 Credits  
Crystal structure, crystal binding, crystal vibrations, thermal properties, free electron gas, band structure of solids, metals, semiconductors, dielectric and optical properties of insulators, and magnetic properties. Prerequisite: Phys 528.

PHYS 531  Electromagnetic Theory  
Three Hours: 3 Credits  
Electrostatics and boundary value problems, magnetic fields, Maxwell’s equation, electromagnetic waves in dielectrics, metals and crystals, wave guides, radiation, potentials, and multipoles. Prerequisite: Phys 500.

PHYS 535  Survey of Current Materials Physics  
Three Hours: 3 Credits  
Crystallography, diffraction and microscopy techniques, defects, diffusion, phase diagrams, order-disorder transformations, interfacial phenomena, nucleation, and solidification. Prerequisite: Consent of instructor.

PHYS 788, 789 Supervised Research in Physics  
Four Hours: 4 Credits each course  
These are research courses designed to enable students to participate in research in the areas of their competence under the supervision of qualified faculty members. Students are required to submit oral presentations of research findings in seminars and to submit a written thesis report to the graduate faculty.

PHYS 790, 791 Seminars in Physics  
One Hour: 1 Credit each course  
This course explores in-depth reviews of modern scientific topics in physics. It enables students engaged in this course to review the literature and provide discussions of the topics. A comprehensive study of planetary systems with emphasis on chemical and physical processes that formed and influenced members of the planetary system. In addition to the inner and outer solar system planets, the course will also discuss the primitive objects in the solar system comets, asteroids, and meteorites.

PHYS 797  Thesis Guidance  
Two Hours: 2 Credits  
This course explores in-depth the thesis topic the student is engaged. It enables the student to be on top of current research and current development in his/her research area.

PHYS 799  Thesis Seminar  
Three Hours: 3 Credits  
This course explores new advances in different areas of physics. It deals with new discoveries, methods, and techniques in different branches of physics. Topics in this course are not covered by other courses in the physics curriculum. The main focus of this course will be on frontier research and hot research topics in physics. It encourages participants to think broadly about developments in Contemporary physics and seeks to develop competence in the applications of new methods and techniques in their research.
DEPARTMENT OF MATHEMATICS

MATH 501  Set Theory and Related Topics
Three Hours: 3 Credits
A study of axioms and operations, relations and functions, construction of real numbers, cardinal numbers, the Axiom of Choice, ordering and ordinals, other types, and special topics.

MATH 505  Abstract Algebra I
Three Hours: 3 Credits
A study of groups, subgroups, homomorphisms, factor groups, products, Sylow’s Theorem, symmetric groups, free groups, ring homomorphisms, ideals, and quotient rings.

MATH 506  Abstract Algebra II
Three Hours: 3 Credits
A study of rings, ideals, maximal ideals, integral domains, polynomial rings, field of quotient of an integral domain, fields, vector spaces, field extensions, root of polynomials, finite fields, and special topics.

MATH 507  Ordinary Differential Equations
Three Hours: 3 Credits
A study of the modern theory of Ordinary Differential Equations and dynamic system including existence and uniqueness theorem, system of differential equations, variation of parameters, Laplace transform, stability of equilibrium solutions, stability of linear system, Phase-plane analysis, stable and unstable and center manifolds, and bifurcation theory.

MATH 512  Probability and Statistics
Three Hours: 3 Credits
A study of relation of probability and statistical theory to practical problems, probability theory, infinite sample spaces, random variables distributions, testing hypotheses, sampling, correlation and regression.

MATH 514  Applied Combinatorics and Graph Theory
Three Hours: 3 Credits
This course deals with applications of graph theory and combinatorics in the social and life sciences. Topics to be discussed include graph algorithms, transport networks, RNA structures.

MATH 517  Foundations of Geometry
Three Hours: 3 Credits
A study of the axiomatic method for development of geometrical systems, the axioms of Euclid and Hubert, topics in Euclidean geometry, geometry of four dimensions, and plane hyperbolic geometry.

MATH 518  Modern Geometry
Three Hours: 3 Credits
An introduction to various types of geometries as developed from sets of assumptions. Finite geometries, topics from Euclidean, projective and non-Euclidean geometries. Consideration of synthetic and analytic approaches.

MATH 521  Real Analysis I
Three Hours: 3 Credits
A study of the real number system, metric spaces, functions, sequences, limits, continuity, point sets, differentiation, and integration. Emphasis will be on basic ideas rather than the manipulative techniques of calculus.

MATH 522  Real Analysis II
Three Hours: 3 Credits
A continuation of MATH 521 to include transcendental functions, infinite series, expansion of functions, and convergence.
MATH 523 Measure Theory  
Three Hours: 3 Credits  
A study of the set algebra and set operations, set functions, convergence of measure sequences, measure spaces and Lebesgue-Stieltjes measure, measure functions, convergence in measure and almost everywhere convergence, and signed measures.

MATH 525 Theory of Numbers  
Three Hours: 3 Credits  
A study of fundamental laws, linear-diophantine equations, property of integers congruencies, Theorems of Fermat and Wilson, quadratic residues.

MATH 527 Complex Analysis  
Three Hours: 3 Credits  
A study of complex numbers, analytic functions, elementary functions, integrals, power series, residues and poles, and mappings.

MATH 541 Point Set Topology I  
Three Hours: 3 Credits  
A study of properties of metric and topological spaces, continuous functions, and applications to Euclidean spaces.

MATH 542 Point Set Topology II  
Three Hours: 3 Credits  
A continuation of MATH 541 to include axioms, quotients and products, compactness and connectedness, metrization, Stone-Cech compactification, and paracompact spaces.

MATH 551 Algorithms and Computations I  
Three Hours: 3 Credits  
A study of features and basic data structures of a high-level programming language. Algorithm construction and methods for evaluating efficiency of algorithms are studied.

MATH 552 Algorithms and Computations II  
Three Hours: 3 Credits  
A study of techniques in design and analysis of computations; algorithms are developed and applied. The data structures which enhance algorithm design and implementation are studied. Implementation is done in high-level language capable of structured, modular programming.

MATH 553 Computational Mathematics  
Three Hours: 3 Credits  
A study of numerical techniques for the solution of problems arising in biological and physical sciences including the treatment of typical problems in applications with special emphasis on the type of data encountered in practice.

MATH 555 Introduction to Functional Analysis  
Three Hours: 3 Credits  
This course is designed to introduce the students to the modern theory of Functional Analysis. Topics discussed include: Linear mappings; Metrization; Seminorms and local convexity; completeness; The Hahn-Banach Theorem; Weak Topologies; Duality in Banach Spaces; Hilbert Spaces and Operators on Hilbert space; and some applications.

MATH 557 Foundation of Harmonic Analysis  
Three Hours: 3 Credits  
This course is designed to introduce the students to various topics related to tools, techniques and applications of the theory of Harmonic Analysis. Topics to be discussed include: Fourier series on T; Convergence of Fourier series; Interpolation of Linear operators; Fourier transforms on the line; Fourier Analysis on local compact Abelian groups; Almost Periodic Functions.
MATH 559  Numerical Analysis  
Three Hours: 3 Credits  
This course is designed to derive and apply techniques of numerical analysis and computational mathematics. Topics include: arithmetic and well-posed computations; Gaussian elimination; functional iteration for a single equation and for a system of equations; computation of eigenvalues and eigenvectors; Weierstrass' approximation theorem; the pointwise error in interpolation polynomials; Hermit interpolation and Chebyshev polynomials; finite elements method.

MATH 561  Mathematical Modeling  
Three Hours: 3 Credits  
The course is designed to study the formulations of abstract mathematical models for real phenomena. It provides an introduction to the theory of model construction as a formal system, examines a variety of applications of the theory and provides practice in the building models.

MATH 575  Introduction to Partial Differential Equations  
Three Hours: 3 Credits  

MATH 631  Biostatistics  
Three Hours: 3 Credits  
A first course in statistics with emphasis on applications in biological and health sciences, including organizing and summarizing data, basic probability, probability distributions, sampling distributions, drawing inferences from population samples via estimation and significance tests, linear regression, analysis, analysis of frequencies, vital statistics, and exposure to analysis of variance. Students will perform computer projects via statistical software system.

MATH 632  Advanced Biostatistics  
Three Hours: 3 Credits  
A continuation of MATH 631 with emphasis on analyzing data arising in the health and life sciences to include advanced inferential statistical methods, analysis of variance, simple and multiple regression and correlation analysis, chi-square analysis of frequencies, and nonparametric statistical methods.

MATH 633  Applied Regression and Correlation Analysis  
Three Hours: 3 Credits  
The study of relationships among variables, including linear regression with one or more independent variables, methods of estimating parameters and testing hypotheses, diagnostics and remedial measures, selection of independent variables via stepwise and other forms of regression techniques, model building, nonlinear regression, and time series.

MATH 788-789  Supervised Research  
Six Hours: 3 Credits each course  
These courses are designed to enable students to participate in research in areas of their competence under the supervision of qualified individuals. Students are required to submit research findings orally in a seminar and to submit a written report to the graduate faculty.

MATH 797  Thesis Guidance  
3 Hours: 2 Credits  

MATH 799  Thesis Seminar  
Three Hours: 3 Credits
Mission
The Ph.D. Program in Higher Education at Morgan State University is a research doctorate in higher education as a field of study, which is designed for those persons whose interests are primarily related to high quality professional preparation to pursue career fields in which research and other scholarly skills are absolutely essential. As an essentially competency-based program that focuses more on learning than the mere accumulation of credits, the Ph.D. in Higher Education Program has as its broad mission the preparation of professors, scholars, policy analysts, and administrators who can assume leadership roles in either the public or private sector.

Program Objectives
To provide a strong but flexible research oriented doctorate in higher education as a field of study, especially for practicing professionals interested in attaining or improving their positions as professors, researchers and policy analysts in the public and private sectors of higher education.

To strengthen and enhance the research capacity of the University and its ability to broaden its higher education research agenda.

To offer advanced educational opportunities for practicing professions that want to improve their competencies in the field but who may not be interested in pursuing the degree.

To strengthen the University’s efforts in the area of diversity and its competitive advantage, particularly in recruiting, admitting and graduating students from all racial, ethnic and cultural backgrounds.

To complement existing doctoral programs, especially to assure more collaborative and cooperative research across educational levels.

To provide an additional level of competencies for those persons whose goal is college/university administration.
Special Admissions Requirements

Official transcripts of all academic work completed at other regionally accredited institutions of higher education, with a GPA of 3.0 or better on a 4.0 scale for the last two years of undergraduate work; and a GPA of 3.5 or better on all postgraduate study beyond the baccalaureate degree.

Official results of national entrance examinations such as GRE (verbal and quantitative sections), the MAT or the GMAT.

International students, whose native language is not English, must provide a TOEFL score of 550 or higher and demonstrate through the required written documentation and interview that they have requisite verbal and analytical skills needed to successfully complete the program.

2-3 page written statement of applicant’s philosophy and career goals in higher education.

A current resume or curriculum vita, documenting professional experiences.

Samples of professional writing, including publications and research proposal abstracts, if available.

Personal interview.

Residency Requirements

Part-time candidates for the Ph.D. degree will satisfy residency requirements by completing 18 credit hours over a period of three consecutive semesters (not including summer). Full-time doctoral candidates must complete two consecutive semesters, carrying 9 credit hours each semester, to satisfy residency requirements. Upon completion of the course requirements and the comprehensive examination, the candidate must complete RDHE 998-Dissertation Seminar (6 credits) and RDHE 999-Dissertation Project (6 credits), and continue to register for RDHE 997-Dissertation Guidance (3 credits) each semester until the dissertation has been successfully defended.

All requirements for the Ph.D. degree must be completed within a period of seven consecutive years. The granting of a leave of absence by the School of Graduate Studies does not automatically extend this time limit.

General Requirements

The 72-credit hour (minimum) curriculum includes five principal components:

Research Core (18 credit hours of advanced course work in quantitative and qualitative methodology and collaborative field research modules when appropriate): These hours do not include the expectation that matriculated student’s present evidence of at least three credit hours in basic statistical analysis. This number (18 credit hours) represents a minimum and a student could expect to take additional research hours depending upon levels of competency upon admission, as well as upon what will eventually be the methodology required for the successful completion of the dissertation project.

All students enrolled in the Ph.D. in Higher Education program path are expected to become competent researchers. Therefore, the program design includes a significant requirement for both quantitative and qualitative research methods. The design also assumes that students admitted will demonstrate competence in basic statistics. Students who do not demonstrate such competence and ability will be required to take an appropriate general survey course in basic statistical methods. It is understood that the general survey course will not count toward the 18 credit hours (minimum requirement) for the research core.

The 18 credit hours (minimum requirement) must consist of at least the following:

Quantitative Methods (Two graduate-level statistics courses): Course work in experimental and non-experimental design and multivariate techniques constitutes part of the requirements. Also recommended are advanced courses designed specifically to develop expertise with statistical techniques commonly used in educational research. However, other equivalent courses from other disciplines may be substituted. The Program will maintain a list of approved graduate-level courses that are offered by other departments of the University.
Qualitative Methods (Two graduate-level courses): Courses that familiarize students with qualitative approaches to research (e.g., action research, case studies, and ethnographic studies) will be offered on an alternate semester basis by faculty in the School of Education and Urban Studies and through other programs under the auspices of the School of Graduate Studies. The emphasis will be on qualitative methods used in the educational and social sciences.

Dissertation-Related Research Methods (At least one graduate-level course): Students will be required to take at least one graduate course focused on methods of inquiry or statistics that are related to their area of concentration and/or dissertation research project.

Research Practicum (This is a required 3 credit-hour course in research – RDHE 889): Students are required, before being admitted to candidacy and undertaking their dissertation projects, to demonstrate their ability to design and conduct research. The practicum provides the student the opportunity to complete the prospectus for the dissertation. For the majority of students this will mean the preparation of the first three chapters of the traditional dissertation; however, if another option for the dissertation is chosen, the prospectus will also reflect those differences.

Field Research (One 3 credit-hour course RDHE 789: Field Research in Higher Education): This course requires research among higher education entities, such as American Council on Education, Middle States Accreditation Association, and the American Association of Community Colleges. The Field Research in Higher Education course provides an opportunity for the student to directly experience the research process prior to the dissertation and a chance to gain entrance to professional networks that are important to the students’ career advancement. Alternatively, students can submit single authored higher education-related research that they completed prior to admission for faculty review and a waiver of the Field Research may be given based on this review.

The following courses must be successfully completed to meet the Research Core requirements:

- **EDSR 604** Introduction to Research Methods (3 credits)
  This course is a prerequisite and does not count toward satisfying the 72 hour requirement for the Ph.D. in Higher Education degree. Students are required to demonstrate competence in basic statistical methods. This prerequisite may also be met on the basis of equivalent courses.

- **EDSR 624** Qualitative Research Methods in Education (3 credits)

- **EDSR 628** Applied Social Research (3 credits)

- **EDSR 719** Quantitative Data Analysis I (3 credits)

- **EDSR 818** Advanced Qualitative Research Methods (3 credits)

- **EDSR 819** Quantitative Data Analysis II (3 credits)

- **EDSR 889** Research Practicum in Higher Education (3 credits)

Additional research courses may be selected from the following list along with approved graduate courses from other disciplines:

- **EDSR 580** Measurement and Evaluation (3 credits)

- **EDSR 739** Management and Analysis of Large Data Sets (3 credits)

- **EDSR 829** Advanced Qualitative Research: Field Research (3 credits)

- **EDSR 789** Field Research in Education (3 credits)

**Required Course Work in Cognate Discipline Fields** (12 hours minimum): Fields include but are not limited to the social and behavioral sciences, business, economics, engineering or additional courses as electives in higher education. The Department of Advanced Studies, Leadership and Policy and the student’s advisor will work collaboratively with other academic units of the University (which relate directly to higher education as a field of study) to develop appropriate cognate courses to serve the Ph.D. in Higher Education Program.
As indicated above, the Ph.D. in Higher Education requires a minimum of 12 credit hours be taken in cognate disciplines. The rationale for the requirements is based on the assumption that students derive the most benefit from course work in one or two closely related disciplines or fields that share some common theoretical base and methods of inquiry. Where appropriate, courses from previous advanced study (e.g., Master’s degree) may be used to satisfy the cognate requirement. However, most students will need to take additional cognate work that is related to their current programs of study and to their proposed research areas. Typically students will choose cognate work at the graduate level in disciplines such as sociology, economics, history, engineering, business, psychology, and mathematics, among others. Students whose previous graduate study has not been in higher education may be required to take additional courses in higher education from those courses listed as electives. Consequently, the theoretical frameworks and research methods used to examine issues will often be shared across and within disciplinary lines. Frequently, elements of different theories are suggested to create interdisciplinary frameworks and models that are more explanatory and appropriate to the phenomenon of interest.

**Foundations Course Work in Higher Education** (24 credits minimum): Foundations courses include historical foundations of higher education, diversity and multiculturalism, organization theory and higher education administration, quality assurance and accountability in higher education, pro-seminar in higher education, and higher education policy analysis. An additional six hours must come from electives.

The Program requires a minimum of 24 credit hours of work in Higher Education as a field of study. Unless students have been awarded transfer credit or waivers of courses as a result of their pre-assessments at entry, students must take six (6) additional required foundations courses and two (2) electives.

Following are the six required Foundations courses:

- RDHE 701 Pro-Seminar in Higher Education (3 credits)
- RDHE 702 Historical Foundations of Higher Education (3 credits)
- RDHE 703 Diversity and Multiculturalism in Higher Education (3 credits)
- RDHE 704 Higher Education Policy Analysis (3 credits)
- RDHE 705 Quality Assurance and Accountability in Higher Education (3 credits)
- RDHE 722 Organizational Theory and Administration/Management in Higher Education (3 credits)

Two Electives (minimum of 6 credit hours) are to be chosen from among the following courses:

- RDHE 720 Contemporary Issues & Concepts in Higher Education (3 credits)
- RDHE 725 The American College Student (3 credits)
- ASLJ 601 Legal Aspects of Education (3 credits)
- RDHE 731 Governance and Coordination in Higher Education (3 credits)
- ASLC 602 Curriculum, Instruction & Assessment in Higher Education (3 credits)
- RDHE 735 Student Affairs Administration in Higher Education (3 credits)
- ASLF 601 Educational Economics and Finance (3 credits)
- RDHE 738 Institutional Research & Planning in Higher Education (3 credits)
- ASLP 601 Politics of Education (3 credits)
- RDHE 745 Student Development Theory and Research (3 credits)

The division of courses into Required and Electives is not intended to imply any priority of ordering with respect to their importance in the preparation of higher educational professionals. It is rather recognition that the clientele for this program would consist largely of practicing professionals many of whom would have had prior exposure to the concepts dealt with in some of these courses. Such courses were made elective. Courses specific to the field of higher education were made compulsory. For example, the concepts of EDSR 739 – Management and Analysis of
Large Data Sets while germane to the practice of Higher Education are likely to have been treated in other courses; the course is therefore an elective. Individual students may be advised as to electives they should take on the basis of their pre-entry assessment. The courses selected as compulsory are reflective of important contemporary issues in higher education and seek to take account of the social, political and cultural milieu in which higher education occurs. In this respect the program has a unique emphasis and one that is in keeping with the mission of Morgan State University.

**Modular “Signature” Courses** (6 one-credit seminars): These courses involve specialty topics designed to enhance the knowledge, skills and abilities of doctoral students. Through faculty or student request, courses may be added such as those that address deficiencies in topics as grant proposal writing, enrollment management, outcomes assessment, or scholarly writing. The program would facilitate the student's acquisition of these skills through traditional or asynchronous methods.

It is necessary to underscore the importance of the knowledge, skills, and abilities successful applicants bring to Morgan State University, and to utilize information about applicants to complement—not duplicate—the competencies they have attained. Thus, the rationale for the implementation of “signature” or “thematic” courses to enhance a student's competencies and outcomes is that duplication will be minimized and the extra time can be used to strengthen other professional competencies and research skills of those matriculating in the program.

**Modular Courses:**

- RDHE 691/Fall Selected Topics in Higher Education Seminars (1 credit)
- RDHE 791/Spring Selected Topics in Higher Education Seminars (1 credit)
- RDHE 891/Summer Selected Topics in Higher Education Seminars (1 credit)

**Seminar Topic Examples:**

- Executive Leadership in Historically Black Colleges and Universities
- Concepts and Practices in Enrollment Management in Higher Education
- Classroom Assessment Strategies
- Competency-based Higher Education Initiatives
- Critical Thinking and Analysis
- High Stakes Testing and Achievement Gaps for Minorities in Higher Education
- Governance in Higher Education
- Ethics in the Academy
- Accreditation and Outcomes Assessment

**Dissertation** (12 credit hours including RDHE 998 - Dissertation Seminar and RDHE 999 - Dissertation Project): Students whose dissertation projects that extend beyond RDHE 998 and RDHE 999 will be required to register Fall and Spring semesters (but not during the Summer Sessions) for additional hours of dissertation (RDHE 997 - Dissertation Guidance) until the dissertation is successfully defended.

**Dissertation Courses—Sequence is:**

- RDHE 889 Research Practicum in Higher Education (3 credits)
- RDHE 998 Dissertation Seminar (6 credits) – Required
- RDHE 999 Dissertation Project (6 credits) – Required
RDHE 997  Dissertation Guidance (3 credits) – Required each semester until the dissertation is completed and successfully defended.

Ph.D. Program Path Design Elements: Other Requirements and Policies

Selection of Supervisory Committee

Students must select three professors to serve on their supervisory committee, two of whom must be from the Department of Advanced Studies, Leadership and Policy (although one of the two may be any MSU graduate faculty). If the student determines that there is a need to select an individual from outside the University, this individual must submit both a letter of agreement and a curriculum vita to the chair of the department for approval. This individual cannot serve as chair of the committee nor receive compensation from the University. All professors who serve on dissertation committees must be professors as designated by the University Graduate Council and must have departmental approval.

Comprehensive Qualifying Examination

The Comprehensive Qualifying Examination is an independent writing project required of all Ph.D. in Higher Education students. However, the department allows for a range of options to constitute the comprehensive qualifying examination. The examination is taken once the student has completed at least seventy-five (75) percent of all course work (54 hours), including at least four of the courses required in the research core. The examination covers the general area of higher education, the candidate’s area of concentration, and a question designed to assess the student’s ability to construct a research design or proposal.

The structure and content of the examination is related closely to the research topic for the dissertation. Thus, there is an assumption that students have read the literature widely and that students will use their critical thinking and writing skills optimally to produce the desired outcomes for the examination.

The following are specific guidelines and must be adhered to:

Each well-researched and documented essay must be at least 15-20 pages, double-spaced. Reference sections must contain a minimum of twenty (20) citations as appropriate to the substance of the dissertation.

Each publishable quality essay must be accompanied by an Executive Summary.

The examinee must prepare an outline of each essay’s content and include this information in the table of contents preceding each essay.

The essays should follow current APA publication style.

For style and formatting directions and information, the examinee will be provided Departmental examination instructions as part of the comps package.

The time period for completing the “Comprehensive Qualifying Examination” is six calendar weeks. Expectations for conduct are included in the School of Graduate Studies Handbook for Dissertation and Theses, “Responsible Academic Conduct and Ethical Research.” (see www.morgan.edu/academics/Grad-studies/pdf/DissThesis-Hand.pdf).

The presentation of three acceptable publishable quality research papers is followed by an oral examination. Scheduling an oral examination is the responsibility of the student’s dissertation chair in consultation with other members of the supervisory committee and the scheduled date must be confirmed with the Department.
Internship

Upon entrance to the Higher Education program, the student who has limited or no experience in higher education may be required to take the internship course (RDHE 885). Participation in the internship must occur before candidacy is conferred. The purpose of the internship is to provide the student with professional and/or research competencies that were identified as incomplete at the time of admittance to the program.

Internship Course: RDHE 789 Internship in Higher Education (3 credits)

Institutional Review Board Approval

Students must seek and obtain approval of the Morgan State University’s Institutional Review Board even in cases where the research may be exempt. The necessary forms can be obtained from the Office of Sponsored Programs and Research.

Preparation and Defense of Dissertation Proposal

After successfully completing the required Comprehensive Qualifying Examination, students must prepare and defend a proposal for the dissertation. Whatever methodological form the dissertation may take, it must be done on the basis of a thorough review of the literature. Typically, this will mean three chapters addressing the nature, background and scope of the problem, research questions, and hypotheses (for quantitative research); a literature review; and a methodological design, covering the specific research methods, subjects, instruments, and data interpretation. Once the proposal has the approval of the student's supervisory committee and the department chair, a publicly announced oral defense of the proposal is conducted.

Advancement to Candidacy

Upon successful defense of the comps and the dissertation proposal students may be advanced to candidacy for the degree and are considered doctoral candidates.

Preparation and Defense of Dissertation

The Ph.D. dissertation must demonstrate conclusively the ability of the student to conceive, design, conduct, and interpret independent, original, and creative research. It must attempt to describe significant original contributions to the advancement of knowledge and must demonstrate the student's ability to organize, analyze and interpret data. In most instances, a dissertation includes a chapter concerning the nature, background, and scope of the problem, along with a clear statement of purpose of the research, research questions, and hypotheses (for quantitative research); a provision for a comprehensive review of pertinent literature; a description of the methodology used in the study; results obtained; and a final chapter containing a critical interpretation of conclusions in relation to the findings of other researchers.

The completed dissertation project should be worthy of publication. Responsibility for writing and editing of the dissertation rests with the student, under the supervision of the chair of the student’s supervisory committee. General guidelines for formatting and submitting dissertations are detailed in the School of Graduate Studies, Handbook for Dissertations and Theses, which may be downloaded from the School of Graduate Studies’ website. Students must also have a working knowledge of the most recent version of the APA publication style manual.

The final defense of the dissertation is an oral exam conducted publicly during which the student presents the dissertation research to the supervisory committee. The presentation must be of highest academic quality. It is the responsibility of the chair of the supervisory committee to submit a letter to the department chair and the School of Graduate Studies affirming the successful defense of the dissertation, including a completed, and up-to date plan of study.
Finally, the student must complete the administrative process for proper submission of the dissertation to the Graduate School.
Ed.D. IN HIGHER EDUCATION – COMMUNITY COLLEGE LEADERSHIP

Christine Johnson McPhail, Ed.D.
Graduate Coordinator
Jenkins Building, Room 323
Tel: (443) 885-1983; Fax: (443) 885-
E-mail: cmcphail@morgan.edu

Objective

The Community College Leadership Doctoral Program is designed to prepare students for senior level leadership roles within the community college setting. The intense program of study leading to a Doctor of Education Degree focuses on training professionals for the unique situations encountered by senior administrators in a community college. A major emphasis of the program is research relevant to the issues and concerns of community colleges.

Program Foundation

The Community College Leadership Doctoral Program offers students a stimulating, highly structured, year-round program of study. The Program is designed for working professionals who are committed to attaining a Doctor of Education Degree. Morgan's mission is to serve a multiethnic and multiracial student body and to help ensure that the benefits of higher education are enjoyed by a broad segment of the population. To help fulfill the University's mission, the Community College Leadership Doctoral Program provides a program of study that prepares students to emerge from the program equipped to handle the unique and diverse leadership challenges associated with leading 21st century community colleges. The College Leadership Doctoral Program is based on the belief that community college leadership requires the following specific knowledge base and competencies (American Association of Community Colleges, 2005):

- Organizational Strategy
- Resource Management
- Communication
- Collaboration
- Community College Advocacy
- Professionalism

Educational Learning Model

The Educational Leadership Learning Model used in the Community College Leadership Doctoral Program creates an environment that prepares students to take advantage of many professional opportunities available in the nation's community colleges. Throughout the program of study, the learner investigates and works on issues relevant to community college leadership. Students work collaboratively in teams to research trends and issues and solve problems relating to community college leadership. Courses are offered year-round with classes meeting on Friday evenings and all day Saturday. Cohorts can complete the program requirements in three years if they follow the prescribed course pattern. The program of study promotes diversity and equity in all entities of the community college environment.

Admission Portfolio

Admission to the Community College Leadership Doctoral Program is approved each fall semester. Students are selected based on the following multiple criteria:
- A complete application.
- A statement of application indicating career goals, including information on the need for a Doctor of Education degree in meeting stated goals.
Official transcripts reflecting all academic work completed at a regionally accredited institution of higher education.

Scores on the Miller Analogies Test or the Graduate Record Examination (Test scores may not be more than five (5) years old from the date of application to the program).

Three letters of recommendation from people who are familiar with the applicant’s scholarship and leadership potential.

A personal interview with the Community College Leadership Doctoral Program Admissions Committee.

Completed supplemental application.

Willingness to matriculate through the program of study as a member of a cohort group.

**Residency Requirements**

Students enrolling in the Community College Leadership Doctoral Program must commit to participating in a Cohort Program. Participating in the first year of the program of study satisfies residency requirements.

**General Requirements for Degree**

All candidates for the Community College Leadership doctoral program must enter as a member of a cohort. Members of the Cohort must commit to this collaborative experience throughout the entire program of study.

All candidates must complete a minimum of sixty-three (63) credit hours at Morgan after admission to the program. Previously completed credits may not be used to reduce the minimum requirements.

All candidates must select a specialized internship or practicum in a community college. The internship must be approved by the Program Coordinator prior to beginning the internship.

After completion of twelve (12) credits, all new doctoral students in the Community College Leadership doctoral program will receive a 12 credit review. This review consists of a personal meeting with the Program Coordinator to review the student’s academic progress. At this time, the student and the Program Coordinator will make a determination as to the student’s academic standing and the student’s continuation in the program. All candidates for the Ed.D. degree in Higher Education must complete the requirements of the Community College Leadership doctoral program’s foundation courses before continuing in the program of study.

The Community College Leadership Program has a curriculum that has a structured sequence. Students who are not able to take a course or must drop a course must register for the course the following year. **Please note that taking a course out of sequence may affect candidacy for the comprehensive examination and graduation since courses are only offered once a year.**

All candidates must pass a written comprehensive examination during the scheduled date(s) set by the program coordinator. The comprehensive examination may be repeated only once. To be eligible to take the comprehensive examination, the student must have completed a minimum of 33 credit hours, have a GPA of 3.0 or higher, and cannot have any “I” or “F” grades.

Each candidate participating in the Community College Leadership doctoral program must submit a dissertation proposal by the end of the first year of study. All requirements pertaining to the eligibility to take the comprehensive examination is applicable toward the submission of the dissertation proposal. The entire dissertation committee must review the proposal, which must be completed to the satisfaction of the committee chairperson prior to continuing with the dissertation.

All candidates in Community College Leadership doctoral program must write and submit a dissertation. When the dissertation has been completed to the satisfaction of the committee chairperson, a dissertation defense will be scheduled during which the students must orally defend his or her work before the entire dissertation committee.

All requirements for the Ed.D. degree in Higher Education must be completed within a period of seven consecutive years. The granting of a leave of absence by the School of Graduate Studies does not automatically extend the time limit.
PROGRAM OF STUDY – Administrative Leadership

Foundation courses (Required)
EDHE 600    The American Community College
EDHE 601    Leadership and Administration of Community Colleges

Community College Specialization (Required)
EDHE 602    Professional Development Seminar for Careers in Community Colleges: Year I
ASLJ 601    Legal Aspects of Education
EDHE 604    Community College Finance & Budgeting
EDHE 605    Community College Planning & Management
EDHE 606    The Learning College
EDHE 607    Student Development in Community Colleges
EDHE 608    Technology in Contemporary Community Colleges
EDHE 609    Contemporary Issues in Community Colleges
ALSP 601    Politics of Education
EDHE 611    Professional Development Seminar for Careers in Community Colleges: Year 2
EDHE 615    The Community College Presidency
EDHE 616    Community College Trustees and Governing Boards
EDHE 617    Clinical Internship - The Community College Experience

EDSR 604    Introduction to Educational Research
EDSR 622    Advanced Methodology and Research
EDHE 627    Mixed Methods Research for Community College Leaders
EDSR 630    Educational Statistics

Dissertation (Required)
EDHE 997    Dissertation Guidance
EDHE 998    Dissertation (6 credits)

Optional Courses
EDHE 612    Public Policy Analysis (1 credit)
EDHE 613    Writing for Publication and Presentation (1 credit)

Unless otherwise indicated, all courses are 3 credits

PROGRAM OF STUDY – Instructional Leadership

Foundation courses (Required)
EDHE 600    The American Community College
EDHE 601    Leadership and Administration of Community Colleges

Community College Specialization (Required)
EDHE 602    Professional Development Seminar for Careers in Community Colleges: Year I
ASLJ 601    Legal Aspects of Education
EDHE 609    Contemporary Issues in Community Colleges
EDHE 606    The Learning College
EDHE 608    Technology in Contemporary Community Colleges

Instructional Specialization (Required)
EDHE 622    Issues in General Education
EDHE 625    Discipline Foundation
EDHE 626    The Scholarship of Teaching
EDHE 629    Assessing Student Learning
EDHE 630    Contemporary Instructional Theories and Practices for Community College Educators - Research Seminar I
EDHE 631    Contemporary Instructional Theories and Practices for Community College Educators - Research Seminar II
EDHE 632  Community College Academic Discipline Practicum (6 Credits)

EDSR 604  Introduction to Educational Research
EDSR 622  Advanced Methodology and Research Design
EDSR 632  Introduction to Quantitative Methods
EDHE 627  Mixed Methods Research for Community College Leaders

Dissertation (Required)
EDHE 997  Dissertation Guidance
EDHE 998  Dissertation (6 credits)

Optional Courses
EDHE 612  Public Policy Analysis (1 credit)
EDHE 613  Writing for Publication and Presentation (1 credit)

Unless otherwise indicated, all courses are 3 credits
MATHEMATICS EDUCATION (Ed.D.)

Glenda Prime, Ph.D.
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Tel: (443) 885-3780; Fax: (443) 885-8238
E-mail: glprime@moac.morgan.edu

Objectives

To prepare a cadre of teachers and administrative staff who are capable of providing instructional leadership and who possess skills in curriculum development and in research in the teaching and learning of mathematics

To develop in participants a sensitivity to the characteristics and needs of urban students in general, and African-American students in particular, and to the peculiarities of urban environments and institutions, and the implications of these for the teaching and learning of mathematics in such settings

To effect positive changes in the teaching and learning of mathematics at all levels of educational systems

Admission

- Applicants seeking entry to the program must have:
  - A Master's degree in Mathematics or in Education. Applicants whose Master's degree is in Education must have earned at least an undergraduate degree in Mathematics.
  - Teacher certification is desirable.
  - Scores on Graduate Record Examination (GRE) or Miller's Analogy Test
  - Minimum undergraduate grade point average of 2.6 and a minimum graduate grade point average of 3.0
  - Classroom Teaching Experience: A minimum of 3 years of teaching experience is desirable.

General Requirements

Award of the degree is contingent upon completion of 63 credit hours of work inclusive of the Dissertation and the Practicum.

A minimum grade point average of 3.0 must be maintained throughout the program. Only courses in which a student has attained a grade of B or better will be counted towards the award of the degree. A student who receives a grade of C in more than 3 courses may be asked to discontinue the program.

Students holding part-time registration will be allowed to take a maximum of 9 credit hours of course work in any one semester. Students holding full-time registration must take a minimum of 9 credit hours per semester.

All candidates will be required to complete a practicum. The practicum will involve an intervention in some aspect of the teaching/learning of mathematics at a selected educational level.

All candidates must pass written and oral comprehensive examinations. Candidates shall become eligible to write the comprehensive examinations upon successful completion of 42 credit hours of course work, 8 credit hours of which should be mathematics content courses. Additionally, students must have removed any "I" or "F" grades in order to be eligible to write the comprehensives. A student who does not meet acceptable standards for any aspect of the comprehensive examination may be allowed to repeat the examination only once.

Each degree candidate must submit a dissertation. When the dissertation has been completed to the satisfaction of the Committee Chairperson, a dissertation defense will be scheduled during which the candidate must orally defend his/her work before the
All requirements for the Ed.D. degree must be completed within a period of seven (7) years. The granting of a leave of absence by the School of Graduate Studies does not automatically extend this limit.

**Residency Requirements**

Part-time candidates will satisfy residency requirements by completing eighteen (18) credit hours over consecutive semesters (not including summer). Full-time students will satisfy these requirements by completing two (2) consecutive semesters, carrying at least nine (9) credit hours each semester.

**Program of Study**

The program consists of 6 components from which students must complete 63-credit hours. The 6 components are:

- **A. Educational Foundations**
- **B. Research**
- **C. Mathematics Education**
- **D. Mathematics Content**
- **E. Dissertation**
- **F. Practicum**

The coursework components of the program are made up of CORE courses and ELECTIVES.

<table>
<thead>
<tr>
<th>Educational Foundations</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ASLC 601 *Curriculum Theory &amp; Development</td>
<td>3</td>
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<td>ASLL 601 *Learning Theory</td>
<td>3</td>
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<tr>
<td>ASLS 601 *Contemporary Issues in Urban Education</td>
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<tr>
<td>Other 600 Level Courses in the School of Education</td>
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<tr>
<th>Research</th>
<th>Credits</th>
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<tr>
<td>EDSR 620 Action Research in Urban Education</td>
<td>3</td>
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<tr>
<td>EDSR 631 *Educational Statistics II (Inferential)</td>
<td>3</td>
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<tr>
<td>EDSR 622 *Quantitative Research Methods in Education</td>
<td>3</td>
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<td>EDSR 624 *Qualitative Research Methods in Education</td>
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<tr>
<th>Mathematics Education</th>
<th>Credits</th>
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<tr>
<td>EDM 620 *History, Philosophy, &amp; Sociology of Mathematics</td>
<td>3</td>
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<tr>
<td>EDM 621 *Planning, Developing &amp; Evaluating the Mathematics Curriculum</td>
<td>3</td>
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<tr>
<td>EDM 630 Methods of Concept Development in Mathematics Education</td>
<td>3</td>
</tr>
<tr>
<td>EDM 650 Professional Development &amp; Practice of Mathematics Teachers</td>
<td>3</td>
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<tr>
<td>EDM 651 Seminar: Current Topics &amp; Trends in Mathematics Education</td>
<td>3</td>
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<tr>
<td>EDM 660 Special Topics in Mathematics Education</td>
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<tr>
<td>EDSM 610 Student Learning, Thinking &amp; Discourse in Mathematics &amp; Science</td>
<td>3</td>
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<tr>
<td>EDSM 621 Communities of Inquiry</td>
<td>3</td>
</tr>
<tr>
<td>EDSM 630 *Assessment &amp; Evaluation in Science and Mathematics Education</td>
<td>3</td>
</tr>
<tr>
<td>EDSM 631 Issues &amp; Applications of Technology in Science &amp; Mathematics Education</td>
<td>3</td>
</tr>
<tr>
<td>EDSM 632 *Instructional Systems Analysis for Mathematics &amp; Science Education</td>
<td>3</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Mathematics Content</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Four courses at the 500 level or above in the Mathematics Department</td>
<td>12</td>
</tr>
</tbody>
</table>

**Practicum**

EDSM 641 Practicum in Mathematics and Science Education | 3
DOCTOR OF EDUCATION – MATHEMATICS EDUCATION

Dissertation
EDSM 998 Dissertation Seminar
EDSM 997 Dissertation Guidance

* denotes CORE requirements
SCIENCE EDUCATION (Ed.D.)

Glenda Prime, Ph.D.
Graduate Coordinator, Mathematics & Science Education Programs
Jenkins Behavioral Science Building, Room 421
Tel: (443) 885-3780; Fax: (443) 885-8238
E-mail: glprime@moac.morgan.edu

Objectives

To prepare a cadre of teachers and administrative staff who are capable of providing instructional leadership and who possess skills in curriculum development and in research in the teaching and learning of science.

To develop in participants a sensitivity to the characteristics and needs of urban students in general and African-American students in particular, and to the peculiarities of urban environments and institutions and the implications of these for the teaching and learning of science in such settings.

To effect positive changes in the teaching and learning of science at all levels of educational systems.

Admission

• Applicants seeking entry to the program must have:
  • A Master’s degree in Science or in Education. Applicants whose Master’s degree is in Education must have earned at least an undergraduate degree in Science.
  • Teacher certification is desirable.
  • Scores on Graduate Record Examination (GRE) or Miller’s Analogy Test
  • Grade Point Average Undergraduate: minimum of 2.6. Graduate; minimum 3.0
  • Classroom Teaching Experience: A minimum of 3 years of teaching experience is desirable.

General Requirements

A minimum grade point average of 3.0 must be maintained throughout the program. Award of the degree is contingent upon completion of 63 credit hours inclusive of the Dissertation and the Practicum. Only courses in which a student has attained a grade of B or better will be counted towards the degree. A student who receives a grade of C in more than 3 courses may be asked to discontinue the program.

Students holding part-time registration will be allowed to take a maximum of 9 credit hours of course work per semester. Students holding full-time registration will be required to take a minimum of 9 credit hours per semester.

All candidates will be required to complete a practicum. The practicum will involve an intervention in some aspect of the teaching/learning of science at a selected educational level.

All candidates must pass written and oral comprehensive examinations. Candidates shall become eligible to sit for the comprehensive examinations upon successful completion of 42 credit hours of course work, 8 credit hours of which should be science content courses. Additionally, students must have removed any “I” or “F” grades. A student who does not meet acceptable standards for any aspect of the comprehensive examination may be allowed to repeat the examination only once.

Each degree candidate must submit a dissertation. When the dissertation has been completed to the satisfaction of the committee chairperson, a dissertation defense will be scheduled during which time the candidate must orally defend his/her work before the entire dissertation committee.

All requirements for the Ed.D degree must be completed within a period of seven (7) years. The granting of a leave of absence
by the School of Graduate Studies does not automatically extend this limit.

**Residency Requirements**

Part-time candidates will satisfy residency requirements by completing eighteen (18) credit hours over consecutive semesters (not including summer). Full-time students will satisfy these requirements by completing two (2) consecutive semesters carrying at least nine (9) credit hours each semester.

**Program of Study**

The program consists of 6 components from which students must complete 63 credit hours. The 6 components are:

A. Educational Foundations  
B. Research  
C. Science Education  
D. Science Content  
E. Practicum  
F. Dissertation

The coursework components of the program are made up of CORE courses and ELECTIVES.

### Educational Foundations

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASLC 601</td>
<td>*Curriculum Theory and Development</td>
<td>3</td>
</tr>
<tr>
<td>ASLL 601</td>
<td>*Learning Theory</td>
<td>3</td>
</tr>
<tr>
<td>ASLS 601</td>
<td>*Contemporary Issues in Urban Education</td>
<td>3</td>
</tr>
</tbody>
</table>

Other 600 level courses in the School of Education

### Research

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDSR 620</td>
<td>Action Research in Mathematics Education</td>
<td>3</td>
</tr>
<tr>
<td>EDSR 631</td>
<td>*Educational Statistics II (inferential)</td>
<td>3</td>
</tr>
<tr>
<td>EDSR 622</td>
<td>*Quantitative Research Methods in Education</td>
<td>3</td>
</tr>
<tr>
<td>EDSR 624</td>
<td>*Qualitative Research Methods in Education</td>
<td>3</td>
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</tbody>
</table>

### Science Education

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
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</thead>
<tbody>
<tr>
<td>EDSC 611</td>
<td>Science, Technology, and Society</td>
<td>3</td>
</tr>
<tr>
<td>EDSC 620</td>
<td>*History, Philosophy, &amp; Sociology of Science</td>
<td>3</td>
</tr>
<tr>
<td>EDSC 621</td>
<td>*Planning, Developing, &amp; Evaluating the Science Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>EDSC 630</td>
<td>Methods of Concept Development in Science Education</td>
<td>3</td>
</tr>
<tr>
<td>EDSC 650</td>
<td>Professional Development and Practice of Science Teachers</td>
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<td>EDSC 651</td>
<td>Seminar: Current Topics and Trends in Science Education</td>
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<td>EDSC 660</td>
<td>Special Topics in Science Education</td>
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<td>EDSM 610</td>
<td>Student Learning, Thinking and Discourse in Mathematics and Science</td>
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<td>*Assessment &amp; Evaluation in Science &amp; Mathematics Education</td>
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<tr>
<td>EDSM 632</td>
<td>*Instructional Systems Analysis for Mathematics &amp; Science Education</td>
<td>3</td>
</tr>
</tbody>
</table>

### Science Content

Courses at 500 level or above in a Science Department of the School of Computer, and Mathematical and Natural Sciences
Practicum
EDSM 641 Practicum in Mathematics and Science Education 3

Dissertation
EDSM 998 Dissertation Seminar
EDSM 997 Dissertation Guidance

* denotes CORE course
URBAN EDUCATIONAL LEADERSHIP (Ed.D.)

Iola Ragins Smith, Ph.D.
Graduate Coordinator, Urban Educational Leadership Program
Jenkins Behavioral Science Building, Room 300
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E-mail: ismith@jewel.morgan.edu

Objective
To provide an educational experience that will prepare doctoral candidates to assume leadership positions in urban school systems and other educational agencies as educational administrators and/or planners, researchers of social policy, fiscal officers, development officers, and facilities and operational analysts.

Admission to Program
Admission to the doctoral program is granted during each academic semester and is based on the following requirements:

- A master’s degree from a regional accredited college or university.
- A grade point average of 3.0 or above on all previous post-baccalaureate work
- Scores on the Miller Analogies Test or the Graduate Record Examination. (Test scores may not be more than five (5) years old from the date of application to the program)
- An interview by the Doctoral Program Admissions Committee.

General Requirements
All candidates for the Ed.D. degree in Urban Educational Leadership must complete a minimum of sixty-six (66) credit hours at Morgan State after admission to the program. Doctoral candidates will select a specialization in Educational Planning and Administration, or Administration and Social Policy. Each candidate will develop an individual program of study in consultation with an assigned faculty adviser.

All candidates must pass a written comprehensive examination. The comprehensive examination may be repeated once. To be eligible to sit for the comprehensives, the candidate must have completed a minimum of 42 credit hours, must have a cumulative GPA of 3.0, and must have removed any “I” or “F” grades.

Each Ed.D. degree candidate must submit a dissertation. When the dissertation has been completed to the satisfaction of the Dissertation Committee, a dissertation defense will be scheduled, during which the student must orally defend his or her work before the entire Dissertation Committee, and others as determined by the Chairperson of the Department.

All requirements for the Ed.D. degree must be completed within a period of seven consecutive years. The granting of a leave of absence by the School of Graduate Studies does not automatically extend the limit.

Residency Requirements
Part-time candidates for the Ed.D. degree will satisfy residency requirements by completing 18 credit hours over a period of three consecutive semesters. Full-time doctoral candidates must complete two consecutive semesters, carrying 9 credit hours each semester, in order to satisfy the residency requirements. Upon completion of the course requirements and the comprehensive examination, the candidate must continue to register for “Dissertation Guidance (EDUC 997)” each semester until the dissertation has been successfully defended.

Program of Study
Core Curriculum (18 Credits)
ECON 507 Economics of Education 3
EDUC 601 Theories and Practices of Urban Educational Leadership 3
ASLS 601 Contemporary Issues in Urban Education 3
PHIL 501 Modern Philosophies of Education 3
ASLP 601 The Politics of Education 3
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>SOCI 560</td>
<td>Seminar in Urban Sociology</td>
<td>3</td>
</tr>
</tbody>
</table>

**Specializations**

**A. Administration and Educational Planning (15 Credits)**

- EDAD 602   Educational Planning and Management   | 3       |
- EDAD 605* Clinical Studies/Internship: Educational Planning | 3-6     |
- EDAD 607   Administration of Public Educational Organizations | 3       |
- EDAD 620   Seminar in Administration and Educational Planning | 3       |

**Credit Hours** 18

**B. Administration and Social Policy (15 Credits)**

- ASLS 660   Urban Systems Analysis                   | 3       |
- EDAD 603* Clinical Studies/Internship: Administration & Social Policy | 3-6     |
- EDAD 630   Seminar in Administration and Social Policy | 3       |
- SFED 651   Social Policy and Futurism               | 3       |

*Course must be repeated for a maximum of 6 credits

**Credit Hours** 15

**Research Concentration (15 Credits)**

- EDSR 620   Action Research in Urban Education        | 3       |
- EDSR 622   Quantitative Research Methods in Education | 3       |
- EDSR 624   Qualitative Research Methods in Education | 3       |
- EDSR 630   Educational Statistics I (Descriptive)    | 3       |
- EDSR 631   Educational Statistics II (Inferential)    | 3       |

**Credit Hours** 15

**Cognate Studies/Electives (12 Credits)**

1. EDSR 623 Application and Computer Utilization for Urban Education Leaders (Required) | 3       |
2.                                                                                     | 3       |
3.                                                                                     | 3       |
4.                                                                                     | 3       |
5. ENGL 564 or 561 Writing Course (if required)                                          | 0       |

**Credit Hours** 12

**Dissertation (Required)**

- EDUC 997* Dissertation Guidance                                                            | 0       |
- EDUC 998   Dissertation                                                                   | 6       |

*Continuous Registration

**TOTAL CREDIT HOURS** 66
EDUCATIONAL ADMINISTRATION & SUPERVISION

EDUCATIONAL ADMINISTRATION & SUPERVISION (M.S.)

Flossie Windley, Ph.D.
Graduate Coordinator, Aspiring Leaders Program
Jenkins Behavioral Science Building, Room 316
Tel: (443) 885-1982; Fax: (443) 885-8243
E-mail: fwindley@moac.morgan.edu

Objective
The Master of Science degree program in Educational Administration & Supervision is designed to prepare qualified individuals for positions as principals, assistant principals, and instructional supervisors in elementary, middle and high schools.

Admission
For **unconditional admission** the applicant must also: possess an elementary or secondary school teachers’ certificate; submit scores on the Miller’s Analogy Test (MAT) or the Graduate Record Examination (GRE); and, be currently employed as a principal, supervisor, assistant principal, or department head.

For **conditional admission** the applicant must also: possess an elementary or secondary school teacher’s certificate; and, be currently employed as a principal, supervisor, assistant principal, or department head. All applicants must have a minimum of three (3) years of teaching experience.

Persons who are not currently working in administrative or supervisory positions may be considered for the program by submitting a letter of recommendation from an administrative or personnel officer who can attest to the applicant’s teaching effectiveness and leadership potential. The letter should be addressed to the Dean of the School of Graduate Studies and submitted with other application materials.

General Requirements
Thirty-nine (39) semester hours are required for the degree.
Students must complete the core program before beginning their area of concentration.
The practicum and the research seminar are required of all students and should be taken as the culminating experience in the program.
All candidates for the degree must pass a written comprehensive examination. This examination can be taken only after the student has completed twenty-seven (27) credits in the program, has a cumulative GPA of 3.0 and has no “1” or “F” grades.

Program of Study

Core Program (12 hours required)
The Core Program is designed to build humanistic and general skills including basic research skills, an understanding of basic principles of learning and instruction, and an understanding of basic principles of urban educational administration and supervision.
EDAD 555   Introduction to Urban Educational Administration and Supervision       3
ASLL  601   Human Development, Learning & Instructional Systems                 3
EDSR 504   Introduction to Educational Research                                3
SFED 510   Historical, Philosophical and Sociological Foundations of Urban Education 3

Credit Hours 12

Supervision and Curriculum (6 hours required)
This component develops skills in instructional supervision needed by both school-based administrators and supervisors.
ASLC 601   Curriculum Theory & Development                                     3
EDSU 560   Supervision & Evaluation of Curriculum & Instruction               3

Credit Hours 6
Concentrations

A. Principals (15 hours required)
This component focuses on the development of management, leadership, implementation, diagnostic, and evaluative skills for students aspiring to be assistant principals, or principals.

- ASLJ 601 Legal Aspects of Education 3
- EDAD 558 School & Community Relations & Political Influences in Urban Schools 3
- EDAD 585 The Role of the Principal, Assistant Principal, & the Instructional Supervisor in the Urban School 3
- GUCO 564 Diagnostic & Prescriptive Procedures in Educational Planning & Development 3
- SPED 582 The Exceptional Child: Administration & Program Needs 3

Credit Hours 15

B. Supervisors (15 hours required)
This component focuses on the development of management, leadership, implementation, diagnostic, and evaluative skills for students aspiring to be supervisors.

- ASLJ 601 Legal Aspects of Education 3
- EDSU 561 The Role of the Instructional Supervisor in the Urban School 3
- EDSU 570 Advanced Procedures in Instructional Supervision & Curriculum Development 3
- GUCO 564 Diagnostic & Prescriptive Procedures in Educational Planning & Development 3
- SPED 582 The Exceptional Child: Administrative & Program Needs 3

Credit Hours 15

Application and Synthesis (6 hours required)
This component is designed to provide practice in applying the knowledge and skills developed in the previously identified areas of the program. Since these experiences draw upon and apply previous knowledge, they should be taken at the culmination of the program.

- EDAD 795 Research Seminar in Problems & Strategies in Urban School Administration & Supervision 3
- EDAD 798 Practicum in Educational Administration & Supervision 3

Credit Hours 6

TOTAL CREDIT HOURS 39
EDUCATIONAL ADMINISTRATION & SUPERVISION - ASPIRING LEADERS PROGRAM

Objective
The Baltimore City Public Schools (BCPS) and Morgan State University have cooperatively developed a graduate program for staff members who possess a master’s equivalency as recognized by the Baltimore City Public Schools and a teaching license. This thirty-credit hour program may accept a cohort group of approximately twenty-five (25) students for a two-year (including one Summer session) master’s degree in educational administration. Each cycle (cohort group) will begin in the Fall and will end at the conclusion of the program (two years). Upon completing the program, participants will have completed requirements for Administrator I Certification (instructional supervisor) and will have attained an earned master’s degree. A person who has completed the program and has qualified for certification as Administrator I must have completed the Maryland Assessment Center Program or passed the Interstate School Leaders Licensure Assessment examination within a five-year period prior to initial appointment as a principal.

Target Audience
Individuals who have demonstrated potential for leadership including exceptional classroom teachers, department heads, master teachers, Admission Review Dismissal (ARD) managers, specialists and central office managers are invited to apply. Candidates must have a minimum of three years of successful teaching experience and possess a master’s equivalency.

PROGRAM OF STUDY Credit

Fall Semester
- ASLJ 601 Legal Aspects of Education 3
- EDSR 504 Introduction to Educational Research 3

Spring Semester
- EDAD 585 Role of the Principal, Assistant Principal & the Instructional Supervisor in the Urban School 3
- EDUC 515 Utilization of Computers in Teaching 3
- ASLL 601 Learning Theory 3

Fall Semester
- ASLC 601 Curriculum Theory and Development 3
- EDSU 560 Supervision and Evaluation of Curriculum and Instruction 3

Spring Semester
- EDAD 798 Practicum in Educational Administration and Supervision 3
- SPED 582 The Exceptional Child: Administration and Program Needs 3

Total Credit Hours 30

The curriculum in the course work described above has been aligned with the Leadership Development Framework approved by the BCPS Superintendent’s cabinet. The curriculum has also been designed to meet the standards of the Interstate School Leaders Consortium. The course content for each semester has been outlined in joint planning sessions by representatives from BCPS and Morgan State. Students will develop portfolios that will reflect their experiences and serve as a basis for their continued professional development.

General Information and Requirements
The activities and projects in the practicum will be ongoing throughout three consecutive semesters. The practicum will require students to apply the knowledge and skills examined in classes to problems and opportunities available at school sites. Students will complete a series of activities which will familiarize them with nearly every aspect of administration at the school sites. A series of seminars will be conducted in which students can share their experiences and benefit from the presentations of practicing principals.
The program requires the successful completion of thirty (30) graduate credits over the five-semester course of the program. A total of six credits will be earned for successful work in each semester. Students must pass a comprehensive examination. Students in good standing are eligible to take the comprehensive examination upon completion of a minimum of twenty-one (21) credits.

Payment of current tuition and fees will be made directly to Morgan State University. Tuition reimbursement guidelines as outlined in the Baltimore Teachers Union (BTU) and Public School Administrators and Supervisors Association (PSASA) contracts will apply to this program. Financial aid is available to a limited number of students on a competitive basis. Students are encouraged to complete the application to enroll in the program. However, completion of the application does NOT guarantee that financial aid will be awarded. The decision to award financial aid is made by the School of Graduate Studies at Morgan State University.

**Eligible Applicants**
The student will: (1) be required to produce proof of a master’s equivalency, (2) be required to produce proof of an advanced professional certificate, (3) be required to produce proof that he/she is fully certified, (4) have completed a minimum of three years of successful teaching, (5) have at least a 2.5 undergraduate average and 2.5 in the major, (6) submit to an interview process and meet all other requirements as outlined in the current Morgan State University Graduate Catalog. The program is competitive and not all persons asked to interview will necessarily be accepted.

**Application Process**
Candidates must complete the preliminary application form and send it to the Aspiring Leaders Program Coordinator, Room 106, Samuel Banks Staff Development Center, by March of each program cycle. Candidates will be contacted for an interview in April and the program will begin in the Fall semester of each program cycle. The application procedure requires submission of the Official Final Application, completion of the interview, completion of a writing sample and submission of the Official Final Application to the School of Graduate Studies, Morgan State University. All applicants who complete these procedures by April 29 of each program cycle will be notified of the status (acceptance or rejection) by July. Only completed applications should be submitted to the Office of the School of Graduate Studies at Morgan State University.

A completed application includes: (1) The Morgan Application form, (2) three letters of recommendation (one from a supervisor who can attest to the applicant’s leadership potential), (3) official copies of the undergraduate and graduate transcripts, and (4) evidence that the applicant possesses a BCPS recognized master’s equivalency. The Coordinator of the Aspiring Leaders Program will arrange interviews. The completed applications with all letters of recommendation and official transcripts should be returned to: The School of Graduate Studies, Morgan State University, 1700 East Cold Spring Lane, Baltimore, Maryland 21251.

**Practicum**
The Practicum in Educational Administration and Supervision (EDAD 798) requires the completion of a series of activities in several areas of educational administration and a major, site-based, administrative project. Some of the activities include experiences in budgeting, scheduling, working with parents, working with school counselors and ARD members, assistant principals, and maintenance and cafeteria staff. The project is determined jointly by the principal, the practicum instructor and the student. The project must involve a major leadership activity at the school. The practicum will be supervised by the practicum instructor and by the principal or an assistant principal. During the practicum, the student will attend a series of seminars conducted to provide interaction among the practicum students and instruction on aspects of the practicum experience.
MATHEMATICS EDUCATION (M.S.)

Glenda Prime, Ph.D.
Graduate Coordinator, Mathematics & Science Education Programs
Jenkins Behavioral Science Building, Room 421
Tel: (443) 885-3780; Fax: (443) 885-8238
E-mail: glprime@moac.morgan.edu

Program Mission
The degree of Master of Science in Mathematics Education aims to fill the need to provide advanced preparation for certified mathematics teachers. Changes in societal demands brought about by advances in mathematics and technology, as well as socio-cultural changes in the high school clientele make the continual re-tooling of mathematics teachers an absolute necessity. Through a curriculum which combines rigorous mathematics content knowledge with advanced research-based pedagogy, the program seeks to produce a highly competent cadre of mathematics teachers, who have the knowledge, skills and attitudes to foster a high level of achievement in mathematics in high school students. This program will produce teachers who have a sound knowledge of the discipline, are skilled in facilitating learning and have the competence to assess students’ needs in mathematics and to modify their own instructional practices to meet those needs.

Objectives
Upon completion of these programs certified teachers will have acquired the competence and attitudes to:

- Draw on insights from cognitive psychology, the nature and philosophy of mathematics and on a sound level of subject matter knowledge, in order to design learning experiences that would result in meaningful acquisition of mathematics concepts by high school students.
- Use technology to enhance student learning in mathematics.
- Create classroom learning environments that are stimulating and intellectually and emotionally safe for diverse student populations of both genders.
- Model an enthusiastic engagement with mathematics and motivate students to excellence in these subjects.
- Be reflective about their own practice and seek to be responsive to changing student needs in a demanding society.

Special Admission Criteria
To be eligible for admission to the program, applicants must have completed a Bachelor’s Degree in Mathematics. Applicants must be certified in the teaching of mathematics at the middle or high school level.

General Degree Requirements
To be eligible for award of the Master of Science in Mathematics Education, a student must have completed 36 credit hours within one of two options. **Option A** includes 30 hours of course work, a school-based Practicum and a Master’s Degree Project. **Option B** includes 30 hours of coursework and a Master’s thesis.

A minimum grade point average of 3.0 must be maintained throughout the program. Students holding part-time registration will be allowed to take a maximum of 9 credit hours of course work per semester. The Masters Degree Project must be completed under the guidance of the student’s academic supervisor. The student must then pass an oral defense of the project. Students who select **Option B** will be assigned a thesis supervisor and a committee who will supervise the research and preparation of the thesis.

Program of Study

**Foundations of Education** (3 credit hours are required in this component).
EDUC 519 The Socio-cultural Context of Schooling (3 credits) OR
Other approved departmental course in the Foundations area.
Research
EDSR 604 Introduction to Educational research (3 credits).
EDSR 517 Action Research in the Classroom (3 credits).

Mathematics Education
EDMA 530 Teaching for Conceptual Development in Mathematics (3 credits)
EDSM 530 Assessment of Learning in Science and Mathematics (3 credits).
EDSM 631 Issues and Applications of Technology in Science and Mathematics Education (3 credits)

Mathematics
EDMA 553 Mathematics in the High School Curriculum 1 (3 credits).
EDMA 554 Mathematics in the High School Curriculum 11 (3 credits)
Two Mathematics Courses 500 level or above. (6 credits).

OPTION A
Practicum (3 credits)
EDSM 540 Practice of Mathematics and Science in Urban Classrooms

Masters Project (3 credits)
EDSM 500 Project in the Teaching of Mathematics or Science

OPTION B
Masters Thesis
EDSM 799 Thesis Seminar
EDSM 797 Thesis Guidance
SCIENCE EDUCATION (M.S.)

Glenda Prime, Ph.D.
Graduate Coordinator, Mathematics & Science Education Programs
Jenkins Behavioral Science Building, Room 421
Tel: (443) 885-3780; Fax: (443) 885-8238
E-mail: glprime@moac.morgan.edu

Program Mission
The degree of Master of Science in Science Education aims to fill the need to provide advanced preparation for certified science teachers. Changes in societal demands brought about by advances in science and technology, as well as socio-cultural changes in the high school clientele make the continual re-tooling of science teachers an absolute necessity. Through a curriculum which combines rigorous science content knowledge with advanced research-based pedagogy, the program seeks to produce a highly competent cadre of science teachers, who have the knowledge, skills and attitudes to realize a high level of achievement in science in high school students. This program will produce teachers who have a sound knowledge of the discipline, are skilled in facilitating learning and have the competence to assess students’ needs in science and to modify their own instructional practices to meet those needs.

Objectives
Upon completion of these programs certified teachers will have acquired the competence and attitudes to:

- Draw on insights from cognitive psychology, the nature and philosophy of science and on a sound level of subject matter competence, in order to design learning experiences that would result in meaningful acquisition of science concepts by high school students.
- Use technology to enhance student learning in science.
- Create classroom learning environments that are stimulating and intellectually and emotionally safe for diverse student populations of both genders.
- Model an enthusiastic engagement with science and motivate students to excellence in these subjects.
- Be reflective about their own practice and seek to be responsive to changing student needs in a demanding society.

Special Admission Criteria
To be eligible for admission to the program, applicants must have completed a Bachelor’s Degree in Biology, Chemistry, Physics or other science discipline.
Applicants must be certified in the teaching of science at the middle or high school level.

General Degree Requirements
- To be eligible for award of the Master of Science in Science Education, a student must have completed 36 credit hours, inclusive of course work, a school-based Practicum and a Master’s Degree Project (Option A).
- A minimum grade point average of 3.0 must be maintained throughout the program.
- Students holding part-time registration will be allowed to take a maximum of 8 credit hours of course work per semester.
- The Master’s Degree Project must be completed under the guidance of the student’s academic supervisor. The student must then pass an oral defense of the project.
- Students who select Option B will be assigned a thesis supervisor and a committee who will supervise the research and preparation of the thesis.
Program of Study

Foundations of Education (3 credit hours are required in this component).
EDUC 519 The Socio-cultural Context of Schooling (3 credits) OR
Other approved departmental course in the Foundations area.

Research
EDSR 504 Introduction to Educational research (3 credits).
EDSR 517 Action Research in the Classroom (3 credits).

Mathematics Education
EDSC 530 Teaching for Conceptual Development in Science (3 credits)
EDSM 530 Assessment of Learning in Science and Mathematics (3 credits).
EDSM 631 Issues and Applications of Technology in Science and Mathematics Education (3 credits)

Mathematics
EDSC 553 Science in the High School Curriculum 1 (3 credits)
EDSC 554 Science in the High School Curriculum 11 (3 credits)
Two Science Courses 500 level or above (6 credits).

OPTION A
Practicum (3 credits)
EDSM 540 Practice of Mathematics and Science in Urban Classrooms

Masters Project (3 credits)
EDSM 500 Project in the Teaching of Mathematics or Science

OPTION B
Masters Thesis
EDSM 799 Thesis Seminar
EDSM 797 Thesis Guidance
EDUCATIONAL ADMINISTRATION & SUPERVISION – CERTIFICATION PROGRAM ADMINISTRATOR I AND ADMINISTRATOR II

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Objective
The Certification program is designed to prepare qualified individuals who already possess a master’s degree and a teaching certificate for certification by the Maryland State Department of Education as “Administrator I,” which qualifies an individual to be assigned as a school supervisor, or as “Administrator II,” which qualifies an individual to be assigned as a school principal.

Students who have not earned a master’s degree in education or in some other area, and a teaching certificate are not eligible for this program.

Admission
For unconditional admission, applicants must also: (1) have a master’s degree from a regionally accredited college or university; (2) have a minimum undergraduate academic average of not less than 3.0 in the major area of study; (3) have an elementary or secondary school teacher’s certificate; (4) have two years of teaching experience; and (5) be currently employed as a principal, assistant principal, supervisor, or department head.

For conditional admission, applicants must also have a minimum undergraduate academic average of not less than 2.5 in the major area of study and meet requirements numbered 1, 3, 4, and 5, above for unconditional admission.

Persons not currently working in administrative or supervisory positions may be considered for the program by submitting a letter of recommendation from an administrative or personnel officer who can attest to the applicant’s teaching effectiveness and leadership potential. The letter should be addressed to the Dean of the School of Graduate Studies. All applicants must be interviewed by the Graduate Program Coordinator.

General Requirements
Eighteen (18) credit hours are required to complete the program. The practicum course, EDAD 798, Practicum in Educational Administration and Supervision, must be taken as the last course in the curriculum sequence. Any exceptions to this requirement must be approved by the Graduate Coordinator.

Program of Study
The certification program requires completion of the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>ASLC 601</td>
<td>Curriculum Theory &amp; Development</td>
<td>3</td>
</tr>
<tr>
<td>ASLJ 601</td>
<td>Legal Aspects of Education</td>
<td>3</td>
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<tr>
<td>ASLD 601</td>
<td>Group Dynamics</td>
<td>3</td>
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<tr>
<td>EDAD 585</td>
<td>The Role of the Principal, Assistant Principal, &amp; the Instructional Supervisor in the Urban School</td>
<td>3</td>
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<tr>
<td>EDAD 798</td>
<td>Practicum in Educational Administration &amp; Supervision</td>
<td>3</td>
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<tr>
<td>EDSU 560</td>
<td>Supervision &amp; Evaluation of Curriculum &amp; Instruction</td>
<td>3</td>
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</table>

Total Credit Hours 18
Upon completion of the program, students will submit their credentials to the Maryland State Department of Education. Certification is awarded by the Maryland State Department of Education. A person who has completed the program and qualifies for certification as an Administrator I may be required to complete successfully the Maryland Assessment Center Program or a state approved equivalent assessment such as the Interstate School Leaders Licensure Assessment examination that is on the official list held by the Assistant State Superintendent of Certification and Accreditation within the last 5 years before initial appointment as a principal may be granted.
ELEMENTARY & MIDDLE SCHOOL EDUCATION (M.S)

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Objective
The Master of Science degree program in Elementary & Middle School Education is designed to enhance the competence of prospective and in service elementary and middle school teachers by providing a comprehensive training experience which emphasizes mastery of one or more sub-specialty areas of the elementary curriculum.

Admission
For unconditional admission, applicants must have also earned:
• A minimum undergraduate average of 3.0 in their major area of study and not less than 3.0 average overall.
• An undergraduate degree in elementary education.

For conditional admission, applicants must have also earned:
• A minimum undergraduate average of 2.5 in their major area of study.
• An undergraduate degree in elementary education or its equivalent.

General Requirements
Students are required to complete thirty-three (33) credit hours and pass a written comprehensive examination.

Program of Study
Core Requirements (12 hours required)
EDSR 504  Introduction to Educational Research 3
SFED 510  Historical, Philosophical & Sociological Foundations of Urban Education 3
CUIN 522  The Elementary/Middle School Curriculum 3
EDPS  554 3

Credit Hours 12

Sub-Specialty (21 hours required)
A.  Science
EDSC 503  Science in the Elementary & Middle School 3
EDSC 504  Seminar in Modern Elementary Science 3
EDSC 506  Physical Science as Inquiry 3
EDSC 510  Biological Science as Inquiry 3
EDCU 515  Utilization of Computers in Teaching 3
Elective 3
EDUC 788 or 789 Supervised Research or 3
EDUC 799  Thesis Seminar 3

Total Credit Hours 21

B.  Mathematics
EDMA 516  Seminar in Elementary/Middle School Mathematics Instruction 3
EDMA 581  Mathematical Principles & Concepts for Elementary & Middle School Teachers I 3
EDMA 582  Mathematical Principles & Concepts for Elementary & Middle School Teachers II 3
EDMA 583  Applied Mathematics for Elementary & Middle School Teachers 3
EDUC 515  Utilization of Computers in Teaching 3
Elective 3
EDUC 788 or 789 Supervised Research or 3
EDUC 799  Thesis Seminar 3

Total Credit Hours 21
Objective
The Master of Arts in Teaching (M.A.T.) degree program is designed for individuals who have a bachelors degree in selected academic disciplines and who desire professional preparation for teaching at the middle school and high school levels.

Additional Criteria For Admission
Applicants seeking admission to the M.A.T. degree program must have:
· Earned a bachelors degree in one of the following academic disciplines: Art, Biology, Chemistry, English, History, Mathematics, Music, or Physics.
· Submit a Miller Analogies or GRE Test score.

Program of Study
The M.A.T. program requires the completion of 43 graduate credits, including a full semester of supervised teaching, to qualify for the masters degree. Students are required to complete a masters comprehensive examination. Candidates shall become eligible to sit for the comprehensives upon successful completion of 27 hours of course work. Additionally, students must have removed any "I" or "F" grades.

Note: All M.A.T. students registering for EDUC 524 and/or EDUC 525 must have, prior to registering for the aforementioned courses, successfully passed the Praxis I: Academic Skills Assessment Tests (i.e. achieve the minimum score required by the State of Maryland for the State Teaching License).

Graduation Requirements
To be eligible for graduation, students must:
· Complete all course requirements.
· Sit for and pass the comprehensive examination.
· Complete (i.e., achieve the minimum score required by the State of Maryland for the Teaching License) the appropriate Praxis II tests, including the Specialty Area test. The aforementioned scores must be submitted to the Department Chairperson and/or the Program Coordinator on/or before December 1 for students completing the program during the Fall semester, and on/or before May I for students completing the program during the Spring semester.

Professional Education Content Courses

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<thead>
<tr>
<th>CREDIT HOURS</th>
<th>COURSE</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>3</td>
<td>EDSR 504</td>
<td>Introduction to Educational Research</td>
</tr>
<tr>
<td>3</td>
<td>REED 520</td>
<td>Teaching Reading in the Content Areas, II</td>
</tr>
<tr>
<td>3</td>
<td>EDSR 517</td>
<td>Action Research in the Classroom</td>
</tr>
<tr>
<td>3</td>
<td>EDUC 500</td>
<td>Introduction to Teaching</td>
</tr>
<tr>
<td>3</td>
<td>EDUC 501</td>
<td>Cognitive Basis for Instruction</td>
</tr>
<tr>
<td>3</td>
<td>EDUC 515</td>
<td>Utilization of Computers in Teaching</td>
</tr>
<tr>
<td>3</td>
<td>EDUC 519</td>
<td>Socio-cultural Context of Schooling</td>
</tr>
<tr>
<td>3</td>
<td>SPED 582</td>
<td>The Exceptional Child: Administrative &amp; Program Needs</td>
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<tr>
<td>12</td>
<td>EDUC 524</td>
<td>Student Teaching (Internship)</td>
</tr>
<tr>
<td>1</td>
<td>EDUC 525</td>
<td>Professional Development Seminar</td>
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<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>43</strong></td>
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</tbody>
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SCHOOL OF EDUCATION & URBAN STUDIES - COURSE DESCRIPTIONS
Departmental Courses: Advanced Studies, Leadership and Policy

ALSC 601   Curriculum Theory and Development
Three Hours: 3 Credits
This course presents social, psychological and political foundations of the curriculum; it examines curriculum issues, theories, trends, and the practices followed in planning and developing the curriculum. Recent developments in curriculum such as the Afro-centric curriculum, bilingual education, and various approaches to multicultural education are examined.

ASLC 602   Curriculum, Instruction and Assessment in Higher Education
Three Hours: 3 Credits
This course, specially intended for those who plan to be curriculum developers and academic affairs specialists in higher education, will devote significant attention to academic and curricular planning, selecting and utilizing instructional strategies. It will also provide an overview of the assessment of student learning outcomes in higher education. Students will be required to develop either a proposal for a new curriculum or the critique of an existing curriculum in a higher education institution.

ASLD 601   Group Dynamics
Three Hours: 3 Credits
This course presents methods of organizing and operating groups to deal with the management of educational change. The course presents techniques of effective communication, group interaction and planning, and implementation for solving educational problems in large and small groups. Students will develop skills and apply them to problems in an educational setting.

ASLF 601   Educational Economics and Finance
Three Hours: 3 Credits
This course, providing a theoretical base for the use of funds for education, addresses topics such as tuition and fees, state methods of financing, financial planning, cost benefit analysis, school and university budgeting procedures, the federal role, and capital outlay.

ASLJ 601   Legal Aspects of Education
Three Hours: 3 Credits
This course involves the analysis of legal issues related to education and includes an examination of major court decisions. It covers the legal structure of education, as well as topics related to religion, academic freedom, employment law, due process, free speech and freedom of expression, search and seizure, desegregation, tort liability, and intellectual property/copyright, among others. The case method is used primarily, with considerable reliance on the Internet.

ASLL   Learning Theory
Three Hours: 3 Credits
This course introduces participants to the fundamentals of human cognition and learning. It encourages participants to explore the implications of theories of learning for the enhancement of classroom teaching and learning.

ASLP 601   Politics of Education
Three Hours: 3 Credits
This course, through a case study and web-based approach, enhances the student's understanding of the role of politics in colleges and universities. It addresses the issues of pressure groups, political tactics and strategies in academic and administrative decision-making, the relationship of governing boards to other higher education constituencies, and the general political terrain that affects the planning, administration and development of higher education.
SCHOOL OF EDUCATION & URBAN STUDIES - COURSE DESCRIPTIONS

ASLS 601 Contemporary Issues in Urban Education
Three Hours: 3 Credits
This course presents an overview of major social policy issues in contemporary urban education. Emphasis is placed on such topics as educational standards, diversity, access, student success, technology, learning centered colleges, institutional effectiveness, and governance and administration. Special emphasis is placed on some perennial issues as they relate to urban community colleges.

ASLS 660 Urban Systems Analysis
Three Hours: 3 Credits
Emphasis is placed on the interactive effect between systems. Various types of systems and their impact on the urban environment will be assessed.

EDSR 504 Introduction to Educational Research
Three Hours: 3 Credits
This course is designed to introduce students to various methods and techniques of educational research; provides intensive experience in reading analyzing and interpreting educational research, and experience in writing abstracts, reports on research, and seminar papers.

EDSR 517 Action Research in the Classroom
Three Hours: 3 Credits
This course, an action research practicum, will provide an understanding of the research process in the context of urban/suburban classrooms. Research understandings and skills acquired at an introductory level are developed to application levels. Topics studied will include research methodologies, statistics and computer applications. Prerequisite: EDSR 504

EDSR 550 Educational Statistics
Three Hours: 3 Credits
This course is a study of descriptive statistics. It will emphasize the organizing and graphing of data, the normal distribution, indices used in describing distributions, correlation and linear regression, and probability.

EDSR 580 Measurement and Evaluation
Three Hours: 3 Credits
Nature and types of educational measures, in the selection and use of such tests are emphasized. Concepts of validity, reliability, and norms, their uses and limitations will be explored. Critiquing and selecting appropriate measuring devices. Constructing measuring devices. Social controversies about the selection and use of such tests are emphasized. The course will involve lecture, group work, case studies, and Internet research.

EDSR 604 Introduction to Educational Research
Three Hours: 3 Credits
This course is designed to introduce students to various methods and techniques of educational research; provides intensive experience in reading analyzing and interpreting educational research, and experience in writing abstracts, reports on research, and seminar papers.

EDSR 620 Action Research in Urban Education
Three Hours: 3 Credits
This course combines a study of research methodology applied to the urban setting with a field experience. The urban leader will be required to demonstrate his/her ability to reflect upon and to evaluate critically the research methodologies he/she has mastered by designing, conducting, analyzing, presenting and defending an educational or community based project. A research project is required for this course.
EDSR 622  Quantitative Research Methods in Education  
Three Hours: 3 Credits  
This course aims to build competence in the design of quantitative research studies in education. Participants will become familiar with the major types of quantitative designs and will study the fit between research questions, research design and statistical analyses. Evaluation is based on the development of a quantitative research proposal. EDSR 631 is a prerequisite.

EDSR 628  Applied Social Research  
Three Hours: 3 Credits  
Focuses on skills necessary for social research in general and survey research in particular. These include, but are not limited to, conceptual design of a research project, constructing operational definitions, sampling logic, instrument design and development, collection and coding of data, computer aided analysis of the data, and writing the research report.

EDSR 630  Educational Statistics I (Descriptive)  
Three Hours: 3 Credits  
A study of descriptive techniques for the analysis of educational data. Students will be introduced to the use of computer application packages such as SPSS in performing such analyses.

EDSR 631  Educational Statistics II (Inferential)  
Three Hours: 3 Credits  
This course focuses on the use of inferential techniques for the testing of hypotheses in educational research. At the end of the course students should have acquired the competence to conduct statistical analyses in their own research and to be more critical consumers of published research.

EDSR 719:  Quantitative Data Analysis in Education  
Three Hours: 3 Credits  
Continued treatment of statistical estimation, testing, and research synthesis. Inferential techniques including ANOVA and multiple regression with computers. Course will involve both lecture and laboratory. Prerequisite: Basic competencies in statistical analysis.

EDSR 739  Management and Analysis of Large Data Sets  
Three Hours: 3 Credits  
Use of statistical packages for data analysis. Emphases on data management, date structures, and related statistical procedures. Course will involve both lecture and laboratory. Prerequisite: Demonstrated competency in statistical analysis at the advanced level.

EDSR 818  Advanced Qualitative Research Methods in Education  
Three Hours: 3 Credits  
Focuses on the underlying philosophy and epistemology of qualitative approaches, types of approaches (i.e., phenomenology, grounded theory, ethnography), specific data collection methods (interviewing, text analysis, observation), and issues of rigor. Prerequisite: Demonstrated competency in basic qualitative approaches.

EDSR 829  Advanced Qualitative Research: Field Research  
Three Hours: 3 Credits  
This primarily experiential course will focus on how to conduct fieldwork and to write reports on qualitative research. Central topics include framing a study, collecting data, considering ethical and political issues, analyzing and interpreting data, and writing for particular purposes. Students are expected to conduct one of the following types of qualitative studies: a micro-ethnography, a life history, a case study, or an action research project.

EDSR 889  Research Practicum in Higher Education  
1-3 Credits  
Before being admitted to candidacy and undertaking their dissertation projects, students must demonstrate their ability to design and conduct research. Generally this will involve participation in a published or refereed article that is presented at professional
conferences such as AAHE, AERA, ASHE, AIR, and the like. The Practicum may also be a cooperative or collaborative research project conducted either with a member of the faculty or with a student or faculty member(s) from another institution. The Research Practicum (i.e., Field Research Project) provides an opportunity to directly experience the research process prior to the dissertation and a chance to gain entrance to professional networks that are important to the students' career advancement. Alternatively, students can submit single authored higher education-related research that they completed prior to admission for faculty review and a waiver of the Research Practicum (Field Research Project) may be given based on this review of types of qualitative study: a micro ethnography, a life history, a case study, or an action research project.

PROGRAM-SPECIFIC COURSES

ADED 531 Instructional Strategies in Adult Education  
Three Hours: 3 Credits  
This course treats approaches to learning that have proved effective for adults. It will include the examination and construction of instructional materials for use in adult education programs and will give attention to standardized evaluative instruments used for adult placement.

ADED 532 Administration and Program Planning in Adult Education  
Three Hours: 3 Credits.  
Considering the principles of administration for adult education programs, the emphasis is placed on leadership styles, organizational structures, and management procedures.

ADED 533 Counseling Adults  
Three Hours: 3 Credits  
This course is a treatment of problems commonly encountered in dealing with adult learners and of techniques for their solution. Basic counseling and guidance processes employed in adult education are studied.

ADED 595 Seminar in Adult Basic Education for Urban Teachers  
Three Hours: 3 Credits  
The primary concern of this course is the development of relevant perceptions for educating urban adult students. Teachers will be provided the opportunity to become aware of the typical daily experiences of an inner-city adult through field trips, walking tours, and visits to homes and Adult Basic Education centers. Attempts will be made to discover new ways of educating the inner-city adult to manipulate his/her experiences advantageously. These perceptions and experiences will be utilized in the development of educational programs for the illiterate and semi-illiterate adult.

CUIN 522 The Elementary/Middle School Curriculum  
Three Hours: 3 Credits  
This course examines the content and organization of curriculum experiences appropriate to meeting the needs of urban elementary school children in a multicultural environment. Attention is given to reviewing and evaluating forces which shape the elementary/middle school curriculum and reflective approaches to generalizing principles of curriculum development.

CUIN 563 Modern Curriculum Strategies in Content Areas  
Three Hours: 3 Credits  
This course provides an opportunity to examine effective processes of curriculum design and implementation with selective study and analysis of recent curriculum trends and materials; discussion and evaluation of research. Major issues and problems relating to teaching of English, mathematics, reading, science or social studies will be discussed.

CUIN 567 Seminar in Interdisciplinary Math and Science Curriculum  
Three Hours: 3 Credits  
This interdisciplinary workshop for teachers is designed to develop and enhance curricula strategies and instructional methodologies in mathematics and science courses.
CUIN 568  Effective Classroom Instructional Techniques for the Urban Teacher  
Three Hours: 3 Credits  
The course seeks to enhance the skills necessary to provide appropriate instructions in an urban school. Specifically, opportunities will be provided to learn both instructional strategies and classroom management strategies.

CUIN 577  Co-Curriculum Program  
Three Hours: 3 Credits  
This course is designed to help teachers and administrators in the organization of those areas of supervision not directly concerned with the curriculum. Such areas as athletic programs, in-service training, school plant utilization, personnel problems and student problems will be emphasized.

CUIN 581  Techniques in Programmed Instruction  
Three Hours: 3 Credits  
This course is an analysis of programmed instruction techniques such as selection, utilization and evaluation of existing programs and teaching machines. The student will be required to develop learning objectives while writing and validating programs.

CUIN 590  Designing Systematic Approaches to Teaching and Media  
Three Hours: 3 Credits  
This course is intended to offer the teacher or school administrator an overview of modern trends and to analyze in detail several new elements and approaches which have contributed to creative teaching. The course content is a blend of the science of learning and the art of teaching. Special focus will be centered on the learner, definition of behavioral objectives, instructional designs, selection of media, and the teacher as the manager of the learning process.

CUIN 596  Practicum in Instructional Methodology  
Three Hours: 3 Credits  
This course provides an opportunity to apply learning principles and instructional techniques and to use educational materials in the planning and implementation of broad educational activities. Laboratory experiences complement the theory.

EDAD 555  Introduction to Urban Educational Administration and Supervision  
Three Hours: 3 Credits  
This course presents a comprehensive analysis of the structure, governance and management of public schools in the U.S. with emphasis on problems facing urban school administration and supervision. Organizational, social, and behavioral theories explaining phenomena of leadership, decision-making and communication processes are introduced. Basic aspects of fiscal and business management of schools are presented with opportunities for simulated practice.

EDAD 558  School and Community Relations and Political Influences in Urban Schools  
Three Hours: 3 Credits  
This course constitutes a study of the principles, philosophies, techniques, agencies, and practices involved in a desirable school and community relations program. Special attention is given to the role of the school administrator and the instructional supervisor in coordinating school-community experiences in urban schools.

EDAD 585  The Role of Administrators in Urban Schools  
Three Hours: 3 Credits  
This course extends the theories and skills first developed in an introduction to urban educational administration and supervision by examining the practical, day-to-day aspects of school administration with emphasis on specific techniques used by the principal, assistant principal, and the instructional supervisor in leadership, staff development, supervising instruction, and managing resources. Prerequisite: EDAD 555.

EDAD 601  Theories and Practice of Urban Educational Leadership  
Three Hours: 3 Credits  
This course provides an opportunity to explore the nature and theories of leadership, both classical and contemporary. Various types of urban community college leaders will be identified and discussed in terms of their style and effectiveness. Problems of urban leaders will be explored as well as their functions and duties. Readings designed to enhance the subject-matter competency of urban leaders will be required.
EDAD 602       Educational Planning and Management
            Three Hours: 3 Credits
An in-depth study of educational planning and management practices in community colleges will be examined in this course. Students will engage in activities to increase their understanding of planning and management processes. Detailed analysis of selected community college case studies will be required and students will be expected to develop a strategic plan.

EDAD 603       Clinical Studies/Internship: Administration and Social Policy
            Six Hours: 3-6 Credits
This course is a supervised internship designed to provide students with the opportunity to participate in a setting where social policy is actually developed and administered. Students will be required to initiate and implement relevant social policy in the specific organizational setting.

EDAD 605       Clinical Studies/Internship: Educational Planning
            Six Hours: 3-6 Credits
This course is a field experience for the student. It is designed to provide an opportunity to put into practice leadership skills developed in prior courses. The internship is tailored to meet the background and interests of the individual student. The student and Graduate Program Coordinator must mutually agree on placement. Students will be required to initiate and complete a research project as a part of completing the requirements of this course. This course should be taken after completing the second year of study.

EDAD 607       Administration of Public Educational Organizations
            Three Hours: 3 Credits
This course examines the interaction of both external and internal resource constraints upon the administrative decision processes in organizational settings with particular emphasis on educational institutions.

EDAD 620       Seminar in Educational Planning
            Three Hours: 3 Credits
This course is designed to provide an in-depth treatment of educational planning processes. A wide range of planning issues and concerns will be discussed. Members of the planning seminar will jointly engage in a variety of activities designed to enhance their understanding of the planning process.

EDAD 630       Seminar in Administration and Social Policy
            Three Hours: 3 Credits
This seminar course will explore current educational, political, social, and policy issues faced by the urban administrator. Seminar participants will engage in appropriately designed activities including case studies, research projects and policy analysis processes. (1 credit hour per semester).

EDAD 795       Research Seminar in Urban School Administration and Supervision
            Three Hours: 3 Credits
This is an advanced seminar course taken at the end of the curriculum sequence. Students are required to identify and assess an urban educational problem, develop a change strategy to solve the problem, and evaluate the success of the project. Completion of Core and Concentration courses is required as prerequisites for this course.

EDAD 798       Practicum in Educational Administration and Supervision
            Three Hours: 3 Credits
This course is a field experience in educational administration or supervision. It is intended to provide the student with an opportunity to put into practice concepts developed in prior courses. The practicum will be adjusted to fit the background and experience of the individual student. Assignments will be supervised by the course individual and will be arranged in cooperation with school systems in the State of Maryland. An extensive seminar is included which permits an opportunity for sharing experiences. This course should be taken at the conclusion of the program.
EDHE 600  The American Community College
Three Hours: 3 Credits
This course provides an in-depth study of the comprehensive community college. The emphasis of the course will be the historical development, mission, structure, functions, student demographics, and governance structures of community colleges. Special attention is paid to the uniqueness of urban community colleges.

EDHE 601  Leadership and Administration in Community Colleges
Three Hours: 3 Credits
This course provides an opportunity to explore the nature and theories of leadership, both classical and contemporary. Various types of urban community college leaders will be identified and discussed in terms of their style and effectiveness. Problems of urban leaders will be explored as well as their functions and duties. This course examines theories and principles of leadership and administration and applies them to concrete urban community college situations.

EDHE 602  Professional Development Seminar for Careers in Community Colleges-Year I
Three Hours: 3 Credits
This course provides an overview of the challenges and opportunities for leadership in contemporary community colleges. It examines the general and specific requirements for completing the program of study in community college leadership, identifying and developing a research topic, defining purposes and methods of research, outlining effective career advancement strategies and developing oral and written communication skills.

EDHE 605  Community College Planning and Management
Three Hours: 3 Credits
This course examines the theory and practice of strategic planning and management in the contemporary comprehensive community college. The course focuses on (1) the nature of the planning process, (2) the role of planning in shaping academic strategy in higher education, and (3) the components of the Integrated Planning Model. Critical questions addressed in this course include: What is a strategic plan? What is the process for creating a strategic plan? How is such a plan developed within a community college? Students working in cohort groups will develop a strategic plan for a prototype comprehensive community college.

EDHE 606  The Learning College
Three Hours: 3 Credits
An analysis of the Learning Centered Community College is the primary focus of this course. It focuses on the organizational culture, pedagogical practices, institutional priorities, curriculum content, design, delivery, student development programs and services, and use of technology in learning centered colleges. Special emphasis is placed on how the Learning Revolution has shifted the concerns of community colleges from teaching to learning in their efforts to enhance the quality of its programs and services. The course also examines the role of major educational leaders who have had an influence on the development of the Learning Revolution.

EDHE 607  Student Development in Community Colleges
Three Hours: 3 Credits
The function of this course is to combine theory with issues facing student development professionals in community colleges. This is accomplished by examining the historical origins and scope of student services and its various components. Special emphasis is placed on understanding the contemporary diverse student populations and their expectations. Other areas of study include an exploration of how technology, learning revolution, financial resources, special interests and other societal changes have transformed student development in community colleges.

EDHE 608  Technology in Contemporary Community Colleges
Three Hours: 3 Credits
The primary emphasis of this course is to examine how technology influences current teaching and learning processes in the contemporary community college. Important aspects of this course are the influence of technology on communication between faculty and students, design and modification of curriculum to meet diverse needs and interests of students, access to sources of infor-
EDHE 609  Contemporary Issues in Community Colleges
Three Hours: 3 Credits
This course presents an overview of major social policy issues in contemporary urban education. Emphasis is placed on such topics as educational standards, diversity, access, student success, technology, learning centered colleges, institutional effectiveness, and governance and administration. Special emphasis is placed on some perennial issues as they relate to urban community colleges.

EDHE 611  Professional Development for Careers in Community Colleges-Year 2
Three Hours: 3 Credits
This course is designed to help doctoral students become better professionals. Students are provided assistance with identifying and developing their talents and leadership skills. Students are encouraged to take a critical look at their strengths and weaknesses and to develop action plans to facilitate their professional growth and development.

EDHE 612  Writing Publishing & Presenting
One Hour: 1 Credit
This course is designed to increase the student's ability to write for publication and to present at meetings and conferences.

EDHE 613  Public Policy Analysis
One Hour: 1 Credit
This course introduces public policy analysis as a skill and tool for community college leaders. The course examines how community college leaders must understand public policy and its impact on community colleges. The course examines major roles of public policy in education.

EDHE 615  The Community College Presidency
Three Hours: 3 Credits
This course utilizes the theories and skills advanced in the leadership and administration course to examine the role of the community college president. The major focus of this course is an in-depth study of the practical, day-to-day functions of the president. Other important topics are formulating a vision of the institution's future, building consensus, taking risks, building and maintaining relationships with faculty and other internal and external constituencies, managing relationships with trustees and governing boards, exercising and delegating authority and other related functions.

EDHE 616  Community College Trustees and Governing Boards
Three Hours: 3 Credits
This course provides an opportunity for students to learn more about the role of community college trustees-who they are as individuals and as a group and to learn about their perceptions of community college governance. It also examines forms of governance, with a critical review of "Policy Governance", board/CEO roles, leadership issues, relationship of boards to the community, and board efficiency and productivity.

EDHE 617  Clinical Internship-The Community College Experience
Three Hours: 3 Credits
The internship experience provides an opportunity for the Intern to link theory to practice. The intern should be engaged in a specific focus such as the analysis of problems and/or organizational issue or special project within the selected college.

EDHE 622  Issues in General Education
Three Hours: 3 Credits
This course examines the role of General Education in community college curricula, including the relationship among career programs, transfer preparation and general education. Students will examine the philosophical, political, and logistical issues from both historical and contemporary perspectives.
EDHE 623  Workforce Development and Community/Industry Partnerships: Issues for Teaching  
Three Hours: 3 Credits  
This course investigates the background, development, function and goals of workforce development at the community college, as well as explores the implications of community and industry partnerships with community colleges. The course will emphasize practical applications of workforce related concepts and research in administration and instruction at the community college.

EDHE 625  Discipline Foundation  
Three Hours: 3 Credits  
This course is designed to examine the history, broad concepts, and the theoretical foundation of a selected discipline. Students will gain a comprehensive understanding of major theories and paradigms related to the area of concentration. The foundation component allows for individually designed approaches and will prepare students to move from the theoretical to the practical in selected disciplines.

EDHE 626  Seminar in the Scholarship of Teaching  
Three Hours: 3 Credits  
This course examines (1) current issues of teaching and learning in higher education, with special emphasis on community colleges, and (2) the literature of the scholarship of teaching. The course will also seek to develop practical competence in the analysis of teaching skills, the development of the teaching portfolio, and the conduct of the classroom-based research.

EDHE 627  Mixed Methods Research for Community College Leaders  
Three Hours: 3 Credits  
The purpose of this course is to introduce the basic concepts, procedures, practices, and techniques associated with the mixed methods approach to educational research. Students will examine the nature and purpose(s) of mixed methods research, as well as fundamental research designs, strategies, data collection, validation, and analysis.

EDHE 628  Assessing Student Learning  
Three Hours: 3 Credits  
This course provides an overview of tools that can be used to evaluate and grade student learning in a course or academic program, including tests, assignments, reflective writing, classroom assessment techniques, portfolios, and published instruments. Students develop a portfolio of tools that can be used in courses they teach, as well as how to evaluate the validity and reliability of assessment tools.

EDHE 630  Contemporary Instructional Theories and Practices for Community College Educators – Research Seminar (I)  
Three Hours: 3 Credits  
This course provides an in-depth understanding and analysis of instructional theories, practices and research in selected academic disciplines. Following discipline-specific related lines of inquiry, students will examine research taken from theoretical and practical perspectives that shape the disciplines.

EDHE 631  Contemporary Instructional Theories and Practices for Community College Educators – Research Seminar (II)  
Three Hours: 3 Credits  
This course expands and advances the examination of research and practice in a specific community college academic discipline. Students will conduct inquiry into topics related to research and practices and will develop a preliminary instructional practicum plan for implementation.

EDHE 997  Dissertation Guidance  
Three Hours: 3 Credits

EDHE 998  Dissertation Seminar  
Six Hours: 6 Credits
EDMA 516  Seminar in Elementary/Middle School Mathematics Instruction
Three Hours: 3 Credits
This course will emphasize instructional techniques involving effective communication, intuitive learning, critical thinking and reflection in applying methodology of modern mathematics to grades K-8. These instructional techniques will be suitable for a technologically developed urban, multicultural environment. Research studies and their implication for teaching will also be considered.

EDMA 530  Teaching For Concept Development In Mathematics
Three Hours: 3 Credits
This course will enhance teachers' pedagogical knowledge through a critical examination of the methods and materials used in teaching K-12 mathematics.

EDMA 554  Mathematical Investigations in the High School Curriculum I
Three Hours: 3 Credits
This course is designed to deepen high school teachers' mathematical content knowledge of the algebra and pre-calculus taught within high schools. Through integrated curricula, numerous connections will be made among mathematical topics and to topics outside of mathematics, particularly science.

EDMA 555  Mathematical Investigations in the High School Curriculum II
Three Hours: 3 Credits
This course seeks to develop in high school mathematics teachers, deeper mathematical content knowledge of the geometry, probability, and statistics taught within high schools. Through integrated curricula, numerous connections will be made among mathematical topics and to topics outside of mathematics, particularly science.

EDMA 581  Mathematical Principles and Concepts for Elementary/Middle School Teachers I
Three Hours: 3 Credits
This course will provide teachers of grades K-8 with a foundation in the algebra of the real number system. Topics include: subsets of the real numbers and binary operations on them, rules of logical inference, polynomials, solution of linear and quadratic equations and inequalities, the function concept and the graphical representation of functions, combinations and permutations of finite sets, the principle of mathematical induction. (Credits for this course are not applicable toward a degree in mathematics.)

EDMA 582  Mathematical Principles and Concepts for Elementary/Middle School Teachers II
Three Hours: 3 Credits
This course consists of the concepts of plane and solid geometry needed to support the mathematics curriculum requirement in geometry for teachers of K-8. Topics to be covered include: plane Euclidean geometry, volumes of regular polyhedral and spheres, non-Euclidean metrics, angles and an introduction to right-angle trigonometry. (Credits for this course are not applicable toward a degree in mathematics.)

EDMA 583  Applied Mathematics for Elementary/Middle School Teachers
Three Hours: 3 Credits
This course develops a wide variety of applications intended to supplement and enhance use of the concepts and techniques covered in EDMA.581 and 582. Applications will be selected to show algebra and geometry in alternative as well as complementary roles as problem solving tools. (Credits for this course are not applicable toward a degree in mathematics.)

EDMA 620  History, Philosophy and Sociology of Mathematics
Three Hours: 3 Credits
This course examines the ways in which the teaching and learning of mathematics are influenced by the history, philosophy and sociology of the discipline. It explores the ways in which cultural forces have shaped mathematics and continue to influence its teaching.
EDMA 621 Planning Developing and Evaluating the Mathematics Curriculum  
Three Hours: 3 Credits  
This course aims to develop skill in all aspects of curriculum development in K — 16 mathematics. Designing the needs assessment, translating needs into curriculum materials, supporting the implementation and selecting appropriate evaluation strategies are some of the skills addressed in this course.

EDMA 630 Methods of Concept Development in Mathematics Education  
Three Hours: 3 Credits  
The course seeks to develop competence in the teaching of mathematics at all levels. It draws on learning theory and applies ideas about how learners acquire concepts to the teaching of mathematics. Students in this course apply theoretical principles to the design and evaluation of lessons that facilitate concept acquisition in mathematics.

EDMA 641 Practicum in Mathematics Education  
Three Hours: 3 Credits  
This course requires the design development and implementation of an intervention into some aspect of mathematics education at the level of the student’s specification. Students will be supervised at all stages of the intervention and will have opportunity to share experiences with peers in a seminar setting.

EDMA 650 Professional Development and Practice of Mathematics Teachers  
Three Hours: 3 Credits  
This seminar course will examine the broad range of concerns and issues addressed in other courses in terms of how professional development of teachers can best be addressed. The research literature on teacher cognition and practice will be used as a basis for developing effective approaches to professional development in mathematics education. Prerequisite: EDSM 610, EDSM 620, EDSM 621, EDSM 630, EDUC 640, CUIN 562, or with permission from instructor.

EDMA 651 Seminar: Current Topics and Trends in Mathematics Education  
Three Hours: 3 Credits  
This seminar course will cover a variety of current and cutting edge topics in mathematics education practice, research and theorizing that may not be addressed in other courses. Guest presentations by researchers and mathematics education practitioners as well as student presentations will be the mode of delivery.

EDMA 660 Special Topics in Mathematics Education  
Three Hours: 3 Credits  
This course provides opportunity for individual exploration of any issue related to mathematics education. Participants are encouraged to identify an issue that is of particular relevance to their areas of specialization and will be required to undertake an extensive exploration of the literature relevant to that issue. A literature review that gives evidence of control of ideas and the ability to reflect critically on the implications of these ideas is the mode of assessment for the course.

EDSC 503 Science in the Elementary and Middle School  
Three Hours: 3 Credits  
This is a subject-matter centered course which includes: (1) orientation to the major themes connected with science in the elementary and middle school; (2) work with science materials in a laboratory center; (3) lectures, demonstrations, and class discussions; and (4) interpretation of recent developments in science at the K-8 level and their application to the multicultural urban classroom. (Not applicable to a degree in science).

EDSC 504 Seminar in Modern Elementary Science  
Three Hours: 3 Credits  
This course will emphasize techniques for organizing, teaching, and evaluating local environmental education programs (grades K-4 and 5-8) that are in consonance with the humanistic, interdisciplinary approaches recommended by the Maryland State Board of Education. An attempt will be made to provide a philosophical educational background to facilitate reflective insights as
to the social, economic and political implications of science as well as the impact of science upon society. (Not applicable to a degree in science).

EDSC 506  Physical Science Inquiry
Three Hours: 3 Credits
This course is designed to give the teacher an opportunity to develop those competencies essential to successful teaching of the concepts of the physical and earth sciences in grades pre-K-8. The inquiry mode of instruction will be emphasized in learning experiences which will include field and laboratory inquiry tasks related to ideas of the universe, matter and energy, and the earth and its atmosphere. Explorations of the inquiry mode will be made with specific attention being given to historical background, the various methods of inquiry, the underlying assumptions, the major purposes, the role of the teacher as leader, communicator, and facilitator, and the role of the learner. (Not applicable to a degree in science).

EDSC 510  Biological Science as Inquiry
Three Hours: 3 Credits
This course is designed to provide the student with the opportunity to develop those competencies essential to successful teaching of concepts of the life sciences in grades pre-K to 8. Field and laboratory experiences will utilize inquiry tasks involving living things, their maintenance and interactions, and the unique role of man in the delicate balance of the ecosystem. Emphasis will be placed on the interdependence of the various disciplines of science to encourage an in-depth understanding of the nature of science and the nature and meaning of inquiry. Prerequisite: SCIE 506 (Not applicable toward a degree in science).

EDSC 530  Teaching for Concept Development in Science
Three Hours: 3 Credits
This course will enhance student pedagogical knowledge through a critical examination of the methods and materials used in teaching K-12 science.

EDSC 553  Science in the Secondary School Curriculum
Three Hours: 3 Credits
This course will focus on the objectives, curricula, methods, strategies and materials, evaluations and teacher preparation relative to the teaching of science in the secondary schools in the United States. This course will provide a historical perspective, assess and interpret current practices and trends, and anticipate future emphasis in secondary school science programs in this country.

EDSC 554  Science in the High School Curriculum I: Matter and Energy
Three Hours: 3 Credits
This course combines science content and pedagogy and is designed for the preparation of high school mathematics and science teachers. By its emphasis on matter and energy, which are overarching, interdisciplinary concepts of science, and its treatment of the factors that promote children’s conceptual development in science, the course reflects the most current thinking on science teacher preparation.

EDSC 555  Science in the High School Curriculum II: Explaining and Predicting Change
Three Hours: 3 Credits
This course combines science content and pedagogy for the preparation of high school science teachers for effective delivery of high school science curricula. The course will engage students with important pedagogical issues and will enhance students’ understanding of important interdisciplinary science concepts.

EDSC 621  Planning, Developing and Evaluating the Science Curriculum
Three Hours: 3 Credits.
This course aims to develop skill in all aspects of curriculum development in K-16 mathematics. Designing the needs assessment, translating needs into curriculum materials, supporting the implementation and selecting appropriate evaluation strategies are some of the skills addressed in this course.

EDSC 630  Methods of Concept Development in Science Education
Three Hours: 3 Credits
This course aims to provide the theoretical bases as well as the skills involved in designing, developing, delivering and evaluating lessons in science education K-I 6. The course draws heavily on the conceptual change in literature and examines the implications of learners’ alternative frameworks for the teaching and learning of science.

EDSC 641  Practicum in Science Education
Three Hours: 3 Credits
This course requires the design development and implementation of an intervention into some aspect of science education at the level of the student’s specification. Students will be supervised at all stages of the intervention and will have opportunity to share experiences with peers in a seminar setting.

EDSC 650  Professional Development and Practice of Science Teachers
Three Hours: 3 Credits
This course examines the broad range of issues addressed in other science education courses with a view towards an integration of these issues into a framework for the professional development of science teachers. The research literature on teacher cognition and practice will be used as a basis for the design of effective approaches to the professional development of science teachers. The course engages students in case analyses and in the clinical supervision of classroom teachers. Prerequisites: CUIN 562, EDSC 630, or with permission of instructor.

EDSC 651  Seminar: Current Topics and Trends in Science Education
Three Hours: 3 Credits
This seminar course will cover a variety of current and cutting edge topics in science education practice, research and theorizing that may not be addressed in other courses. Guest presentations by researchers and science education practitioners as well as student presentations will be the mode of delivery.

EDSC 660  Special Topics in Science Education
Three Hours: 3 Credits
This course provides opportunity for individual exploration of any issue related to science education. Participants are encouraged to identify an issue that is of particular relevance to their areas of specialization and will be required to undertake an extensive exploration of the literature relevant to that issue. A literature review that gives evidence of control of ideas and the ability to reflect critically on the implications of these ideas is the mode of assessment for the course.

EDSM 500  Masters Project in Mathematics and Science Education
Three Hours: 3 Credits
This course fulfills the requirement for the Project option of the Master of Science in Mathematics Education or the Master of Science in Science Education. Students who select this option are required to undertake a classroom-based curriculum project in mathematics or science under the supervision of an advisor. The project involves the design, development, implementation and recording of curriculum materials in mathematics or science.

EDSM 530  Assessment of Learning in Mathematics and Science
Three Hours: 3 Credits
This course explores the basic concepts related to the assessment of student learning in mathematics and science. It encourages teachers to think broadly about the purposes of assessment and to view assessment as an integral part of the instructional process. The principal focus of the course is to help participants to develop the competence to design and use a range of traditional and alternative assessment strategies.

EDSM 610  Student Learning, Thinking and Discourse in Mathematics and Science Education
Three Hours: 3 Credits
This course is designed as a seminar that will examine recent theory and research in student learning, thinking and discourse. Students will be required to read extensively in the areas of constructivism, schema theory, conceptual change, problem-solving and control strategies as a basis for understanding the teaching and learning environment in mathematics and science classrooms.
EDSM 611  Science, Technology, and Society  
Three Hours: 3 Credits  
Science, Technology, and Society (STS) are an approach to the teaching of science that emphasizes the teaching of science concepts in the contexts of technology and society. This seminar course will examine the extensive literature on the relationship among science, technology, and society, and how this area of thinking has been affecting efforts to revise curriculum development and practices in science education. Prerequisite: EDSM 620

EDSM 620  History, Philosophy, and Sociology of Science  
Three Hours: 3 Credits  
Traditional science curricula have largely ignored any explicit attention to the history, philosophy and sociology of science. However current trends in both the research and practice of science education have placed increased emphasis on the implications of these for understanding the nature of science. This course will identify key issues in the history, philosophy and sociology of science and will provide students with a basis for critical analysis of science education curricula.

EDSM 621  Communities of Inquiry: Issues in Curriculum and Instruction  
Three Hours: 3 Credits  
The notion of classrooms as communities of inquirers is an important strand of research and theorizing in education. This seminar course critically examines the research literature in this field. Cooperative groups, classroom discourse analysis and social constructivism are explored as bases for the creation of learning communities in science and mathematics classrooms. Prerequisites: EDSM 610, or with permission of instructor.

EDSM 630  Assessment and Evaluation in Science and Mathematics Education  
Three Hours: 3 Credits  
This seminar course will examine a variety of approaches for assessing and evaluating student learning, thinking, and discourse in the science and mathematics classroom. Special emphasis is placed on critically evaluating the assumptions underlying each approach to classroom assessment. In addition to traditional assessment strategies, the course seeks to develop competence in the use of alternative strategies such as journals, portfolios, classroom observation and discourse analysis. Prerequisites: EDPS 554, or with permission of instructor. Recommended prior course: EDSR 621.

EDSM 631  Issues and Applications of Technology in Science and Math Education  
Three Hours: 3 Credits  
This course will critically examine the issues and assumptions driving our society towards increased use of technology as well as the effects of such use of technology on individuals and groups. After examining these issues, students will examine effective uses of technology in the classroom. Student projects will involve the development of technological applications for instructional purposes.

EDSM 632  Instructional Systems Analysis for Mathematics and Science Education  
Three Hours: 3 Credits  
In this course students are encouraged to go beyond the development of technical skill in using educational technologies to reflect deeply on how these technologies can be integrated into instructional systems that qualitatively change the way that teaching and learning occurs in schools. Students combine their knowledge of learning theories with a knowledge of educational technologies in the design of effective learning experiences in mathematics and science.

EDSR 520  Computer Programming for School Personnel  
Three Hours: 3 Credits  
This course is designed to give the teacher or administrator an overview of the applications requiring the integration of data processing and analytical programming techniques. Programming tools include familiarity with language used in the field, such as FORTRAN and COBOL. Use of the computer in developing grade-point student lists, grade analysis, and student report card procedures will be discussed.

EDSU 540  Supervision of Student Teachers and Interns
Three Hours: 3 Credits
Theory and practice in supervising student teachers are given focus in this course. Experience will be provided to stimulate teachers to establish objectives for quality student teaching and internship, to develop creative approaches to professional laboratory experience, and to analyze and evaluate critically some of the emerging theory and practice in student teacher supervision. Topics will include inner city programs, teaching analysis models, micro-teaching, non-verbal communication, conference techniques, sensitivity training, reward systems, stimulation activities, and professional development schools concepts.

EDSU 541 Instructional and Managerial Strategies for the Beginning Teacher
Three Hours: 3 Credits
This course seeks to strengthen the skills necessary to assure effective classroom instruction. Specifically, this course provides the beginning teacher an opportunity to analyze and demonstrate the essential competencies identified for success in teaching within the urban environment.

EDSU 560 Supervision and Evaluation of Curriculum and Instruction
Three Hours: 3 Credits
This course provides the student with an opportunity to analyze the role of the administrator in K-12 schools as the person primarily responsible for coordinating the development of the curriculum and for establishing procedures useful to the continuous evaluation and improvement of the curriculum and instruction.

EDSU 561 The Role of the Instructional Supervisor in the Urban School
Three Hours: 3 Credits
This course provides a comprehensive view of the nature of supervision including an understanding of professional relations and trends, basic concepts of organization and planning, and leadership roles and functions as they relate to the continuing growth of teachers.

EDSU 570 Advanced Procedures in Instructional Supervision and Curriculum Development
Three Hours: 3 Credits
This course presents advanced concepts and procedures requisite for the supervision of instruction and curriculum development. It is a requirement for those preparing to be instruction supervisors. Prerequisites: EDSU.560 and CUIN 562.

EDSU 575 Problems of Administration and Supervision in Urban Schools
Three Hours: 3 Credits
The focus in this course is on problems in administration and supervision peculiar to schools in an urban setting. Effective techniques for promoting wholesale interpersonal relations are explored. Special attention is given to the dynamics of working with staff, parent and student groups, and the more promising approaches to school administration and supervision in urban locations.

EDUC 500 Introduction to Teaching
Three Hours: 3 Credits
This course is the introductory course for the Master of Arts in Teaching program. It is designed to provide students with an overview of the teaching profession and with current trends and viewpoints in American education.

EDUC 501 Cognitive Basis for Instruction
Three Hours: 3 Credits
This course is designed to acquaint the student with current research in the field-of-cognitive-psychology. The nature of teaching as well as how teachers teach will be examined for implications for curriculum development and teaching.

EDUC 505 Field Experience in Urban Education
Three Hours: 3 Credits
This course is an adjunct experience to EDUC.506. Specifically, it is organized to illuminate and supplement the theory offered in EDUC.506-Seminar in Education. Its purpose is to help students deepen their understanding of urban education, relate theory to their previous knowledge, and test knowledge in their professional experiences. The course, conducted primarily outside the classroom, must be taken concurrently with EDUC 506.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Hours</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 506</td>
<td>Seminar in Urban Education</td>
<td>3</td>
<td>3</td>
<td>This course provides opportunity to work on individual problems relating to the education of the disadvantaged. Currently research problems and programs are reported and analyzed. The seminar is to be taken concurrently with EDUC 505.</td>
</tr>
<tr>
<td>EDUC 515</td>
<td>Utilization of Computers in Teaching</td>
<td>3</td>
<td>3</td>
<td>This course is a survey of action research in the utilization of computers in urban and multicultural teaching. It provides knowledge and experience for pre-service and in-service teachers, and for other school personnel in (1) the preparation of instructional materials, (2) the techniques of interactive instruction, and (3) the use of tracking in content areas such as science, mathematics, and reading/language arts.</td>
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<tr>
<td>EDUC 519</td>
<td>The Socio-Cultural Context of Schooling</td>
<td>3</td>
<td>3</td>
<td>This course will identify the social and cultural factors that impinge on the nature of urban schooling. Among the topics discussed are race and ethnicity, the politics and economics of education, and the history of modern urban school systems.</td>
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<tr>
<td>EDUC 523</td>
<td>Methods of Teaching/Content Areas</td>
<td>3</td>
<td>3</td>
<td>This course will examine both general and specific methods of teaching at the secondary school level in various content areas. Specialists from the University disciplines that prepare teachers will join in cooperative instruction with faculty from the School of Education and Urban Studies.</td>
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<tr>
<td>EDUC 524</td>
<td>Student Teaching (Internship)</td>
<td>12</td>
<td></td>
<td>This course will provide an intensive semester-long internship in teaching that is cooperatively monitored and supervised by University professors and selected public school teachers in urban and suburban school systems. The university professors will work with public school clinical teachers and make periodic visits to schools for observation and conferences.</td>
</tr>
<tr>
<td>EDUC 525</td>
<td>Professional Development Seminar</td>
<td>3</td>
<td>3</td>
<td>Enrollment must be concurrent with enrollment in EDUC 524-The Internship. The weekly seminar will examine selected interns. From time to time, invited speakers and panelists will share experiences with the interns.</td>
</tr>
<tr>
<td>EDUC 610</td>
<td>Administration of Higher Education</td>
<td>3</td>
<td>3</td>
<td>Students examine the organization and administration of colleges and universities, and the role and function of administrators in relation to faculty, students, governing boards, and external forces.</td>
</tr>
<tr>
<td>EDUC 788-789</td>
<td>Supervised Research</td>
<td>3</td>
<td>3</td>
<td>Each course is designed to enable students to participate in research in areas of their competence under the supervision of qualified individuals. Students are required to submit research findings orally in a seminar and to submit a written report to the graduate faculty.</td>
</tr>
<tr>
<td>EDUC 797</td>
<td>Thesis Guidance</td>
<td>2</td>
<td></td>
<td>This guidance provides students who have not completed their thesis in the assigned semester a mechanism for continuing their work under faculty supervision.</td>
</tr>
</tbody>
</table>
EDUC 799  Thesis Seminar  
Three Hours: 3 Credits

EDUC 997  Dissertation Guidance  
Three Hours: 3 Credits  
Dissertation guidance provides students who have not completed their dissertation in the assigned semester, a mechanism for continuing their work under faculty supervision.

EDUC 998  Dissertation Seminar  
Six Hours: 6 Credits

ELED 521  Social Studies in the Elementary and Middle School  
Three Hours: 3 Credits  
This course is designed to give teachers and administrators an overview of social studies innovations, trends, and programs at the K-8 grades. The focus will be on the meanings and implications of the content of social studies materials.

GU CO 557  Principles and Practices in Student Personnel Service  
Three Hours: 3 Credits  
This course is designed to provide the student with a functional knowledge in the following areas: (1) background (history and philosophy) and purposes of student personnel services; (2) program and services necessary for the implementation of the 'student personnel point of view;' (3) organization, administration, and evaluation of student personnel services.

GU CO 559  Supervising Curriculum and Instruction in the Elementary School  
Three Hours: 3 Credits  
This course examines the principles of supervision, program planning, improving pupil growth and achievement, and improving educational materials and techniques. Essential management functions such as communicating and motivating will also be explored. Laboratory experiences complement the theory.

GU CO 564  Diagnostic and Prescriptive Procedures in Educational Planning and Development  
Three Hours: 3 Credits  
This course provides techniques for interpreting and translating results from educational and psychological evaluation into classroom procedures and practices. Demonstration and observation with some testing experiences are included. Treatment strategies are presented and critically analyzed.

MAED 563  Review of Research in Instruction in Elementary/ Middle School Mathematics  
Three Hours: 3 Credits  
This course acquaints students with historic and recent information from theory and research on teaching and learning mathematics in grades K-8. It engages students in the use of methods and materials for instruction that such information suggests.

MAED 564  Review of Research in Instruction in Middle/High School Mathematics  
Three Hours: 3 Credits  
This course acquaints students with historic and recent information from theory and research on teaching and learning mathematics in grades 6-12. It engages students in the use of methods and materials for instruction that such information suggests.

MAED 600  The Use of Language and Logic for the Instruction of Mathematics  
Three Hours: 3 Credits  
This course examines the critical use of language (words/terms, syntax/directions) for the learning and teaching of number and mathematical concepts. Special emphasis will be given to the foundational concepts of special relations and conservation, and deductive and inductive reasoning. Particular attention will be given to related research and curriculum development.
MAED 602 Strategies in Interdisciplinary Mathematics-Science and Technology  
Three Hours: 3 Credits  
Illustration and analysis of mathematical models for problems in biological, physical and applied science.

MAED 620 Action Research in Mathematics Education I  
Three Hours: 3 Credits  
This course helps to develop strategies to be used by teachers and administrators to bridge the gap between theory and practice. It assists teachers and administrators in initiating research on classroom problems related to teaching, learning and assessments.

MAED 621 Action Research in Mathematics Education I  
Three Hours: 3 Credits  
This course is a continuation of MAED.620.

MAED 680 Review of Standardized and Curricula Based Measurement and Evaluation in Elementary/Middle School Mathematics  
Three Hours: 3 Credits  
In this course, basic concepts in the use of test and inventories in mathematics for grades 6-12 are reviewed. Principles appropriate to the selection and interpretation of commonly used standardized instruments and selected curricular/teacher generated instruments are discussed.

MAED 681 Review of Standardized and Curricula Based Measurements and Evaluation in Middle/High School Mathematics  
Three Hours: 3 Credits  
In this course, basic concepts in the use of test and inventories in mathematics for grades 6-12 are reviewed. Principles appropriate to the selection and interpretation of commonly used standardized instruments and selected curricular/teacher generated instruments are discussed.

MAED 997 Dissertation Guidance  
Three Hours: 3 Credits  
Dissertation guidance provides students who have not completed their dissertation in the assigned semester, a mechanism for continuing their work under faculty supervision.

MAED 998 Dissertation Seminar  
Six Hours: 6 Credits  

RDHE 691/791/891 Selected Topics in Higher Education Seminars  
1 Credit Each: Maximum of 6 Credits may be taken depending upon student need)  
These one-credit seminars involve specialty topics designed to enhance the knowledge, skills and abilities of particular doctoral students in response to the results of required diagnostic assessment at entry. The rationale for offering of “signature” or “thematic” courses to enhance a student’s competencies and outcomes is that duplication will be minimized and the extra time can be used to strengthen other professional competencies and research skills of those matriculating in the program. [Note: Similar courses may also be offered with the prefix “EDHE.”]

RDHE 701 Pro-Seminar in Higher Education  
Three Hours: 3 Credits  
This course is designed to provide a forum for the discussion of range of topics related to research, development, policy analysis, organization, administration, and management of higher education. This course, offered exclusively to students in the Ph.D. in Higher Education Program, examines the core values, structures, processes, language, and stakeholders in American higher education. Considerable emphasis is placed on the examination of the modes of inquiry and the nature of research, especially to assist the student in making an early selection of topics for the Research Practicum and the Dissertation.
RDHE 702  Historical Foundations of Higher Education
Three Hours: 3 Credits
This course is designed to provide students with an overview of the development of American higher education from the colonial period to the present, thus equipping students to understand the origin of contemporary practices and dilemmas. Special emphasis also on the contributions of African-Americans and other minority groups to the development of higher education in America.

RDHE 703  Diversity and Multiculturalism in Higher Education
Three Hours: 3 Credits
This course is designed to improve the student's understanding and working knowledge of diversity and multiculturalism as quality enhancers in higher education. It focuses particularly on best practices and utilizes case studies and the Internet as a means of providing useful applications of concepts presented and examined. Increased global awareness and the development of effective intercultural skills are also expected outcomes of the course.

RDHE 704  Higher Education Policy Analysis
Three Hours: 3 Credits
This course is designed to strengthen the capacity of students to use statistical analysis and other modes of inquiry to analyze and interpret higher education data in the development and review of higher education policies. The course will also give attention to the major theories of evaluation in educational policy through the use of the case study method.

RDHE 705  Quality Assurance and Accountability in Higher Education
Three Hours: 3 Credits
This course, a unique requirement among other Ph.D. in Higher Education preparation programs in the United States, provides through a modified Web-based format an overview of the practices and modalities in higher education related to quality assurance and accountability. It acquaints students as well with common used definitions of quality assurance, and it provides an in-depth review of best practices in accreditation, assessment (student achievement and institutional effectiveness), including such topics as TQM, CQI, and Benchmarking.

RDHE 706  Technological Applications in Higher Education
Three Hours: 3 Credits
This course is designed to develop and enhance the skills of students in making academic and administrative applications of technology to higher education practice, policy development, and research requirements. Specific emphasis will be placed on the use of software packages developed for the social sciences and education, as well as the utilization of electronic databases. Students will be expected to demonstrate their competency in applying appropriate computer applications to academic assignments and research projects.

RDHE 720  Contemporary Issues and Concepts in Higher Education
Three Hours: 3 Credits
This course, usually but not always proceeded by "Historical Foundations in Higher Education", is designed for the discussion and analysis of a wide range of current issues and concepts in higher education. The course will rely on significant use of the Internet and World Wide Web for both written assignments and in class discussions. Students must be acquainted with current journals (including e-journals) dealing with topics in higher education.

RDHE 722  Organizational Theory and Administration/Management in Higher Education
Three Hours: 3 Credits
This course examines organizational theory, structures, systems, and administrative procedures in a variety of higher education institutions. Some patterns of governance and policy development will also be addressed. However, the student who needs a more in-depth treatment of governance should take "Governance and Coordination in Higher Education, especially if he or she already has strong competencies in organizational theory and extensive experience in the administration and management of higher education. The course will involve the use of case studies for the application of theory to practice.
RDHE 725  The American College Student  
Three Hours: 3 Credits  
This course is designed specifically for those persons who have had limited experience in higher education institutions. As such, it covers a range of topics related to the American college student, such as demographic and background characteristics; values, attitudes and perspectives. It also addresses the relationship between student profiles and relevant services that should be provided to students. Class discussions, reading assignments, Internet research, and written projects will address topics such as access, persistence and success.

RDHE 731  Governance and Coordination in Higher Education  
Three Hours: 3 Credits  
This course is designed to enhance the student’s understanding and working knowledge of organizational structure and the basic principles of coordination and control of higher education at the local, state and regional levels. Principles of leadership expressed through controlling and coordinating boards: role of boards and staff in planning, development and operation. Limited focus on state approval, and regional/national accrediting bodies. Students desiring to have more advanced competencies in the latter should consider taking “Quality Assurance and Accountability in Higher Education”.

RDHE 735  Student Affairs Administration in Higher Education  
Three Hours: 3 Credits  
This course is designed especially for the student who desires to concentrate on this particular area for administrative and research interest. It is also designed to enhance the student’s understanding of basic student development theory as applied to various models for administering student services in colleges and universities. Some focus is also directed toward contemporary issues in the management and maintenance of student affairs programs in higher education, including the examination of research in student affairs administration.

RDHE 738  Institutional Research and Planning in Higher Education  
Three Hours: 3 Credits  
This course provides an overview of the nature and scope of policy research at the institutional and state level, as well as an overview of the various approaches to strategic planning in American colleges and universities. The course also addresses the corollary requirement for data and information system to support planning processes and the policy research agenda of colleges and universities. Registration in this course requires competencies in the basic modes of inquiry, particularly statistical analysis.

RDHE 745  Student Development Theory and Research  
Three Hours: 3 Credits  
This course provides a comprehensive review and critique of key student development and environmental theories, emerging theories and models, and concepts for theory-to-practice.

RDHE 789  Field Research in Higher Education  
Three Hours: 3 Credits  
This course requires research dealing with higher education entities such as state, federal, and regulatory agencies. The student may also obtain professional experience and gain interest to professional networks such as NAFEO, ACE, HACU, WIHE, AACC, and Middle States Accreditation.

RDHE 885  Internship in Higher Education  
Three Hours: 3 Hours  
This course for those students requiring an expanded experience in higher education provides a semester long internship cooperatively monitored and supervised by university professors and selected university contacts.

RDHE 889  Research Practicum in Higher Education  
Three Hours: 3 Credits  
The practicum provides the student the opportunity to complete the prospectus for the dissertation. For the majority of students this will mean the preparation of the first three chapters of a traditional dissertation.
RDHE 997  Dissertation Guidance
Three Hours: 3 Credits
This course provides students who have not completed their dissertation in the assign semesters a mechanism for continuing their work under faculty supervision.

RDHE 998  Dissertation Seminar
Six Hours: 6 Credits
This course is design to direct students through the dissertation process with assistance from their supervisory committee.

RDHE 999  Dissertation Project
Six Hours: 6 Credits
The Ph.D. Program in Higher Education requires a minimum of 12 credits for the completion of the dissertation project.

REED 518  Teaching Reading in the Content Areas I
Three Hours: 3 Credits
This course provides an overview of the reading process in the content areas. Students will be introduced to a variety of assessment methods, instructional strategies and approaches to achieve content area goals.

REED 520  Teaching Reading in the Content Areas II
Three Hours: 3 Credits
This course is designed to provide students with a functional knowledge in the following areas: (1) use of a variety of assessment methods texts and technology to assist content area readers; (2) connection between reading, writing and student learning in the content areas; (3) development and implementation of content area lesson plans.

SCED 567  Strategies in Interdisciplinary Mathematics and Science Curriculum & Instruction in Elementary/Middle School Science Education
Three Hours: 3 Credits
This course provides illustration and analysis of mathematics for problem solving in elementary/middle school science.

SCED 573  Review of Research in Instruction in Elementary/Middle School Science Education
Three Hours: 3 Credits
This course acquaints students with historic and recent information from theory and research on teaching and learning science in grades K-8 and engages students in methods and materials for instruction that such information suggests.

SCED 574  Review of Research in Instruction in Middle/Secondary School Science Education
Three Hours: 3 Credits
This course acquaints students with historic and recent information from theory and research on teaching and learning science in grades 6-12 and engages students in methods and materials for instruction that such information suggests.

SCIE 504  Seminar in Modern Elementary Science
Three Hours: 3 Credits
The seminar is designed to involve students in a multitude of current and important issues in Science Education as they relate to the teaching of sciences in grades K-8. Opportunities will be provided to review current research studies in a variety of Science Education journals and publications; review the current Science Education standard; obtain free classroom materials; discuss key concepts with resource persons; explore issues such as multiculturalism, constructivism and misconceptions; examine excellent sources of information for classroom use from the world wide web (computers); and make preliminary plans for conducting science education studies.
SCIE 610 Chemical Evolution of Life  
Three Hours: 3 Credits  
This course is a multi-disciplinary scientific analysis of the beginning and evolution of living organisms.

SCIE 620 Special Topics in Earth, Astrophysics and Related Planetary Sciences  
Three Hours: 3 Credits

SCIE 622 Action Research in Secondary Education I  
Three Hours: 3 Credits

SCIE 623 Action Research in Secondary Education II  
Three Hours: 3 Credits

SCIE 630 Current Issues in Environmental Science with Emphasis on Laws of Nature  
Three Hours: 3 Credits

SCIE 682 Review of Curricula Based Measurement and Evaluation in Elementary/Middle School Science  
Three Hours: 3 Credits  
This course provides the student an opportunity to analyze critically the practices, viewpoints, and research on the science curricula for elementary/middle schools.

SCIE 683 Review of Curricula-Based Measurement & Evaluation in Middle/Secondary School Science  
Three Hours: 3 Credits  
This course provides the student an opportunity to analyze critically the practices, viewpoints, and research on the science curricula for middle/secondary schools.

SCIE 711 Seminar in Science-Special Topics  
Three Hours: 1 Credit  
This course is a multidisciplinary approach which includes individual and team presentation.

SCIE 721 Instructional Terms and Language Usage in Science Education  
Three Hours: 3 Credits  
This course provides a review of instructional terms and the use of language in the instruction of science.

SCIE 722 Seminar in Science, Special Topics  
Three Hours: 1 Credit  
This course is a multidisciplinary approach which includes individual and team presentation.

SCIE 723 Seminar in Science, Special Topics  
Three Hours: 1 Credit  
This course is a multidisciplinary approach which includes individual and team presentation.

SCIE 997 Dissertation Guidance  
Three Hours: 3 Credits  
Dissertation guidance provides students who have not completed their dissertation in the assigned semester a mechanism for continuing their work under faculty supervision.

SCIE 998 Dissertation  
Six Hours: 6 Credits
SFED 510  Historical, Philosophic and Sociological Foundations of Urban Education
Three Hours: 3 Credits
This course examines education from the perspective of the history, sociology, and philosophy of education. Some of the major topics are social forces and schooling; the social system and culture of the school; social class differences in education; the place of philosophy in education; and functional analysis of educational problems.

SFED 582  The Exceptional Child: Administrative and Program Needs
Three Hours: 3 Credits
This course is designed to sensitize educators to the need for effective educational programming for exceptional children. It explores the legal basis of P.L. 94-142 and its amendments for working with handicapped children in regular educational programs. An overview of the area of special education and its implications for teaching and learning constitutes the framework for the emphasis of this course. Special attention is given to the characteristics and needs of minority handicapped students.

SFED 651  Social Policy and Futurism
Three Hours: 3 Credits
A detailed analysis of futurism and its implication for the development of social policy is the focus of this course. Particular emphasis is placed on a study of futurism in relation to education.
SCHOOL OF COMPUTER, MATHEMATICAL & NATURAL SCIENCES

COURSE DESCRIPTIONS

DEPARTMENT OF BIOLOGY

BIOL 520 Biomolecular Structure
Three Hours: 3 Credits
Covers topics in protein structure and function, enzyme kinetics and mechanisms of enzyme action, metabolism of carbohydrates, lipids, amino acids and nucleotides, bioenergetics and energy considerations in biochemistry, and analyzes various techniques and instrumentations used in biochemical studies.

BIOL 521 Bioecology
Three Hours: 3 Credits
This course is designed to develop an in-depth understanding of the major principles connected with the interrelationships of organisms and organisms and their environment. The major chemical, physical and biotic factors of the environment will be analyzed for their influence on the distributor and functional processes of plant and animal communities.

BIOL 522 Advances in Research Techniques
Three Hours: 3 Credits
This course provides the first-year graduate student with an intensive hands-on approach to modern techniques and methodologies of biomedical research. Students will be introduced to theories and practices of qualitative and quantitative analysis of proteins, gel electrophoresis, enzyme assays, column chromatography, nucleic acid “blot-and-probe” techniques, differential centrifugation, cell culturing, and radioisotope methodology.

BIOL 523 Seminar Topics in Modern Biology & Environmental Sciences
Two Hours: 2 Credits
This course explores in-depth reviews of modern scientific topics in biology and environmental sciences. It enables students engaged in this course to review the literature and provide discussions on the topics.

BIOL 524 Advance Molecular Genetics
Three Hours: 3 Credits
This is a lecture course designed as a logical extension of the Introductory Genetics and Population Biology courses encountered in the undergraduate curriculum. The relatedness of life forms through the central dogma concept is the fundamental driving force in explaining the how and why of studying simpler organisms as a prelude to an understanding of the more complex systems. This course is therefore designed to continually enhance the knowledge base in the ever-changing field of molecular genetics both as to theory and practice.

BIOL 525 Cellular Biology
Three Hours: 3 Credits
This course is designed to integrate basic concepts of cellular biology with general topics in the areas of biochemistry, genetics and molecular biology. The major topics of discussions will be: structure, function and biogenesis of macromolecules and cellular organelles, cell membrane and the cytoskeleton, membrane transport mechanisms, cell surface and intracellular communication, energy requirements for cellular activities, synthesis and sorting, distribution of specific organellar proteins and their major role in overall cellular function. Taken together, specific topics from these four major disciplines will provide the students with an understanding of how cells function. Also, the major experiments that led to the discovery of some of these important facts in cellular biology will be emphasized.

BIOL 526 Molecular Biology
Three Hours: 3 Credits
This is lecture course will provide students with the theoretical basis for appreciating and understanding the basic principles and methodologies of modern molecular biology through lectures and discussions of the current scientific literature and textbook assignments on selected topics in molecular biology. The course is designed to integrate basic concepts of molecular biology with fundamental topics in other areas of cellular biology, biochemistry, microbiology, and molecular genetics. Special emphasis will be given to topics covering the following themes: structure and properties of nucleic acids; DNA replication, repair, and recombination; molecular biology of gene expression and its regulation in prokaryotes and eukaryotes; protein structure and translational
control; and molecular biotechnology with an emphasis on recombinant DNA technology, protein engineering, vaccines and therapeutics, immunodiagnostics, and genetic engineering of mammalian and plant organisms.

BIOL 527 Microbiology of Emerging Pathogens
Three Hours: 3 Credits
This is a lecture course that will address the microbiology of emerging pathogens with the hope of understanding the factors involved in disease emergence, prevention, the public health impact, and control. The course will cover selective pathogen topics such as Hantavirus, emerging foodborne pathogens, HIV/AIDS and multidrug resistant tuberculosis among high-risk group's etc. The course will follow instruction and discussion of recent publications on particular topics.

BIOL 528 Immunobiology
Three Hours: 3 Credits
This course will emphasize the significant new advances in the field of immunology, immunobiology and immunotherapy. This multidisciplinary field of study integrates molecular biology, cell biology and physiology. Students will acquire an in-depth understanding of basic research in immunology that is applicable to the diagnosis and the development of treatments for immunodeficiencies, autoimmune disease, cancer and AIDS. The course will also emphasize new biotechnological strategies for the development of novel vaccines.

BIOL 531 Environmental Science
Three Hours: 3 Credits
This course is designed to provide students with an in-depth understanding of fundamental scientific principles and concepts necessary for a better understanding of environmental science, environmental problems, causes and solutions. Emphasis is placed on urban environmental problems, issues and solutions together with the impact of man on the environment. Prerequisites: BIOL 521.

BIOL 536 Molecular and Behavioral Neuroscience
Three Hours: 3 Credits
This course will investigate the fundamental concepts of the nervous system, brain, and behavior by emphasizing the interrelationships between neurobiology and cognitive science. Part of the course will focus on the nervous system structure, function and development and will be used in understanding the biological basis of learning, memory, and behavior in both normal and altered states. Current research, such as the latest discoveries in the genetics and molecular biology of behavior and the social implications of these discoveries will be used in graduate level discussions and presentations. Critical thinking and analysis of relevant scientific literature will also be emphasized.

BIOL 540 Computational Biology/Bioinformatics
Three Hours: 3 Credits
The course will facilitate the use of computational tools in studying diverse biological problems including developing population growth and prey models, utilizing statistical models in explaining biological concepts, analyzing fundamental problems of DNA and protein structure and function, performing biological database searches and information retrieval, and providing real time three-dimensional images and high resolution graphics displays.

BIOL 601 Molecular Biotechnology
Six Hours: 4 Credits
This is predominantly a laboratory course with direct hands-on laboratory experiences using state-of-the-art techniques and experimental approaches in the production of heterologous proteins in prokaryotic and eukaryotic cells utilizing bacterial (prokaryotic) as well as insect, yeast, and mammalian (eukaryotic) expression vectors. Students will use molecular biology approaches, including techniques in recombinant DNA and genetic engineering technology to clone, express, affinity-purify, and characterize the recombinant proteins produced in the prokaryotic and eukaryotic host cells. The theoretical component of the course introduces the student to the fundamental principles, applications, strategies, and societal concerns of Molecular Biotechnology, and will facilitate an understanding of important theoretical concepts which will be complemented by the methodologies and experimental strategies covered in the laboratory portion of the course.

BIOL 602 Environmental Immunotoxicology
Three Hours: 3 Credits
Studies the adverse effects of environmental chemicals and toxins on the immune system. The course will examine the influence of environmental or toxic agents on immune function and the cellular and molecular mechanisms that lead to alterations in the immune response.
BIOL 603  Marine and Aquatic Biology  
Four Hours: 4 Credits  
This course examines the broad and multidisciplinary approach to marine and aquatic life and the biological processes in shallow coastal waters and the open ocean. It examines and quantifies organismal physiological response to the abiotic and biotic environment. Aspects of population and community structure, reproduction and larval biological reproduction systems are also examined. Prerequisite: Bioecology, Basic Statistics.

BIOL 604  Ecosystem Analysis  
Four Hours: 4 Credits  
This course exposes students to ecosystem-level questions; demonstrates field-data collection and laboratory analysis; emphasizes data manipulation on microcomputers; and introduces professional data presentation techniques (graphing, transparencies, slides, multi-media, etc.). Some student projects are expected to generate large enough data sets to test hypothesis and develop publishable conclusions. Class sessions comprise lecture and field/laboratory components. Prerequisite: core courses.

BIOL 606  Environmental Toxicology  
Three Hours: 3 Credits  
Covers relevant problems in environmental toxicology, with an emphasis on the nature, distribution and effects of environmental toxicants; exposure and dose-response characterizations, and risk assessment and risk management will be covered.

BIOL 609  Environmental Microbiology  
Three Hours: 3 Credits  
Covers current topics in selected areas of environmental microbiology, with an emphasis on the genetics and pathophysiology of microorganisms.

BIOL 610  Molecular Epidemiology of Infectious Diseases  
Three Hours: 3 Credits  
Application of molecular typing techniques to study of microbial pathogens to increase understanding of epidemiology of infectious diseases. Evaluation of methods used in outbreaks and epidemics reported in literature. Prerequisite: Advanced Cell & Molecular Biology.

BIOL 611  Food and Water Borne Diseases  
Three Hours: 3 Credits  
Study of identification and characteristics of chemicals and biological agents implicated in food and water borne disease outbreaks and conditions or circumstances by which food contamination occurs. Examination of food protection activities conducted by local and state government at the retail level. Principles and requirements of public water supply for protection of public health. Includes essential characteristics of water quality and sources, water treatment and distribution systems with associated health hazards; public health, epidemiology, risk assessment; surveillance, regulatory needs to assure safe public water supplies. Prerequisite: Environmental Sciences.

BIOL 612  Advanced Environmental Health  
Three Hours: 3 Credits  
Examines health issues, scientific understanding of causes, and possible future approaches to control of the major environmental health problems in industrialized and developing countries. Topics include how the body reacts to environmental pollutants; physical, chemical, and biological agents of environmental contamination; vectors for dissemination (air, water, soil); solid and hazardous waste; susceptible populations; biomarkers and risk analysis; the scientific basis for policy decisions; and emerging global environmental health problems.

BIOL 619  Business Concepts for Environmental Managers  
Three Hours: 3 Credits  
The course offers environmental managers a basic understanding of accounting systems-to enable them to interpret financial data in corporate and governmental settings, to integrate traditional business concepts with those of sustainable environmental management, and to recognize the role of environmental management among the multiple interests within business negotiations. The first part of the course develops skill in financial accounting, and this knowledge is then applied to areas in environmental financial management, including budgeting, project finance, and business development and strategy.
BIOL 620  Environmental Genetics
Three Hours: 3 Credits
Studies the effects of exposure to various environmental chemicals and carcinogens on genetic diseases. The course examines the alteration of the genetic make-up of model organisms by environmental chemicals and other carcinogens, and the influence of such environmental factors on the alteration of target gene expression and development of carcinogenesis.

BIOL 624  Environmental Biotechnology
Three Hours: 3 Credits
The course examines the use of biotechnology techniques and methods for the analysis and solution of environmental problems. Areas of particular interest include the use of novel microorganisms for applications in the removal of pollutants, toxic chemicals, and hazardous wastes from the environment.

BIOL 625  Seminar Topics in Modern Biology and Environmental Sciences
Two Hours: 1 Credit
Gives an in-depth review of modern topics in the biological and environmental science fields. It enables students to review the research literature and provide discussions on the topics. These seminars emphasize contextual and integrated understanding, analysis and synthesis, conflicts and ethical issues, enhanced communication and teamwork.

BIOL 626  Environmental Physiology of Plants
Three Hours: 3 Credits
The course examines the regulation of plant growth and development, nutrition, and the effects of environmental stress, chemicals, and pollutants on the physiology and development of crop plants of economic importance.

BIOL 627  Molecular Toxicology of Diseases
Three Hours: 3 Credits
Advanced discussion of molecular mechanisms whereby chemical, physical, and biological agents produce harmful effects on biological tissues. Prerequisite: Advanced Cell and Molecular Biology.

BIOL 628  Environmental Carcinogenesis
Three Hours: 3 Credits
Biochemical and molecular basis of carcinogenesis induced by chemical and physical agents in the environment, including detailed discussion of multi-stage process of carcinogenesis, mechanisms of action of specific chemical and physical carcinogens; current approaches to identification of carcinogens, and chemoprevention strategies.

BIOL 629  Developmental Neurotoxicology
Three Hours: 3 Credits
This course will introduce students to the full spectrum of environmental effects on the developing nervous system. This includes pre-and postnatal effects of toxicants on the developing nervous system along with the discussion of physical, psychological and sociological constraints of nervous system development. Special emphasis will be given to effects on the development of the mammalian Central Nervous System [CNS], however, Peripheral Nervous System [PNS] effects and other vertebrate models will be discussed where and when relevant.

BIOL 630  A Seminar I: Global Environment and Public Health
Two Hours: 1 Credit
Explores the impact of development and industrialization on the global environment, such as disease transmission, desertification, deforestation, collapse of marine fisheries, declining agricultural production, and biodiversity loss. Provides an overview of scientific and policy issues surrounding global environmental health issues.

BIOL 630B  Seminar II: Reproductive and Developmental Toxicology
Two Hours: 1 Credit
Investigates chemicals that can induce adverse reproductive and developmental outcomes. Discussion topics include identification and characterization of specific classes of toxic agents, mechanisms of action of these agents at the molecular and cellular level, and risk assessment and regulatory issues. Prerequisite: Advanced Cell and Molecular Biology.

BIOL 630C  Seminar III: Biotechnology, Bioinformatics, and Ecogenetics
Two Hours: 1 Credit
Methodologies currently used for characterization, storage, and retrieval of genetic information relevant to gene-environment in-
teractions that contribute to diseases of public health importance. Working knowledge of molecular genotyping and phenotyping, genomics, and bioinformatics related to genetic testing provided. Prerequisite: Advanced Cell & Molecular Biology.

**BIOL 630D** Seminar IV: Neuroepidemiology and Environmental Risk Factors  
Two Hours: 1 Credit  
Focus on neurologic diseases and etiology. Presentation of descriptive epidemiology, clinical features, and risk factors, including stroke, Parkinson’s disease, Alzheimer’s disease, AIDS, multiple sclerosis, and other disorders. Prerequisite: Advanced Environmental Sciences.

**BIOL 631** Bioethics and Communications  
Three Hours: 3 Credits  
Students in this course analyze, discuss and write on traditional philosophical theories regarding the nature of the moral good. They then apply these theories to critical issues and selected cases involving experiments with human subjects, organ transplantation, in vitro fertilization, the use of animals in research, the collection and publication of research data, peer review, conflicts of interest, and other topics of current concern. The course also emphasizes how to write scientific papers for peer-reviewed journals, for in-house scientific progress reports, for lay audiences, and for grant applications. Approaches to making formal oral presentations and posters are also presented. Class discussions center around writing and speaking skills and the author/speakers’ responsibility to present accurate accounts of results, applications, and implications of their research. Students have weekly writing and reading assignments.

**BIOL 632** Professional Communication and Research Conduct  
Three Hours: 3 Credits  
This class will prepare graduate students to be proficient in all major aspects of professional scientific communications. In addition ethical issues connected to the communication of research results and professional conduct will be discussed. Students are expected to complete assignments involving their own research results. This class will be most effective if taken during the students second year in the program, after significant research results have already been obtained.

**BIOL 788-789** Supervised Research  
Four Hours: 4 Credits each course  
These are research courses designed to enable students to participate in research in the areas of their competence under the supervision of qualified faculty members. Students are required to submit oral presentations of research findings in seminars and to submit a written thesis report to the graduate faculty.

**BIOL 797** Thesis Guidance  
Two Hours: 2 Credits

**BIOL 799** Thesis Seminar  
Three Hours: 3 Credits

**BIOL or CHEM 800-804** Supervised Doctoral Research  
Three Hours: 3 Credits each course  
These courses are designed to allow students to participate in doctoral research in areas of their choosing under the supervision of a research mentor and also to defend their thesis for the doctoral degree. Students are required to submit their research findings in a seminar topics series.

**BIOL 997** Dissertation Guidance  
Three Hours: 3 Credits

**BIOL 998** Dissertation Seminar  
Six Hours: 6 Credits
DEPARTMENT OF CHEMISTRY

CHEM 531 Advanced Analytical Chemistry I
Three Hours: 3 Credits
The course covers the principles and methods at advanced level in modem chemical analysis. Topics will include separation techniques, GC, HPLC, Spectrometry, lasers and electrophoresis. Prerequisite: CHEM 314.

CHEM 532 Advanced Analytical Chemistry II
Three Hours: 3 Credits
Advanced topics in Chemical equilibrium and kinetics in analytical chemistry, Thermal and Electrochemical methods will also be covered in this course. Prerequisite: CHEM 314.

CHEM 533 Statistical Methods in Analytical Chemistry
Three Hours: 3 Credits
This course covers a variety of computer-aided models to treat and interpret laboratory experimental data. Topics to be covered include: Errors in measurement, bi and multivariate data analysis, analysis of variation (ANOVA) and ancillary techniques including Monte Carlo simulations. Prerequisite: CHEM 314 or equivalent.

CHEM 534 Advanced Analytical Chemistry III
Three Hours: 3 Credits
Selected topics in electronics and computer applications in analytical chemistry. Signal processing, computer-aided analysis, electronic gates in signal processing in analytical chemistry. Prerequisite: CHEM 314.

CHEM 541 Chemical Kinetics
Three Hours: 3 Credits
This course will cover the fundamental understanding of chemical reaction rates and mechanisms, orders of reaction and their application to biological systems, thermochemical kinetics, catalysis and fast reactions in gases and condensed phases. Prerequisite: CHEM 308.

CHEM 542 Colloids and Surface Chemistry
Three Hours: 3 Credits
Discussion of colloid materials and their applications, surfaces, interface and reactivity on material surfaces and interphases. Stability of colloids, rheology, emulsions and foams. Prerequisite: CHEM 308.

CHEM 543 Chemical Thermodynamics
Three Hours: 3 Credits
Thermodynamics and its applications; solutions and phase equilibria for one and multicomponent systems, equilibrium considerations in thermodynamics. Prerequisite: CHEM 307.

CHEM 544 Molecular Spectroscopy
Three Hours: 3 Credits
This course deals with chemical structures at the atomic and molecular levels. It uses quantum mechanical principles and the accompanying symmetry and molecular point groups methodology to understand the fundamental basis of the interaction of electromagnetic radiation with matter and the interpretation of the resulting atomic and molecular spectra and their relationship to chemical reactivity. Prerequisites: CHEM 308 and 407.

CHEM 545 Special Topics in Analytical/Physical Chemistry
Two Hours: 2 Credits
Special topics course in analytical/physical chemistry, which may be taken as an independent course by graduate students with concentration in analytical or physical chemistry. It covers current/frontier areas in analytical or physical chemistry, which may include electrochemistry, separation techniques, quantum mechanical treatment of molecules and structural determination. Prerequisite: Graduate Standing with consent of Instructor.
CHEM 546  Quantum Chemistry  
Three Hours: 3 Credits  
Rigorous study of the basic tenets of quantum mechanics as applied to chemical systems; variational and perturbation theory, 
Hartree-Fock and Franck-Condon principle, the electronic structure of atoms and molecules and their energy systems. Prerequisite: CHEM 308 and CHEM 407.

CHEM 547  Computational Chemistry  
Three Hours: 3 Credits  
Modern theoretical (classical and quantum) methods used in the study of molecular structure, bonding and reactivity. Determination of molecular spectra, relationship to experimental techniques and concepts of practical applications. Prerequisite: CHEM 308, CHEM 407 and COSC 237.

CHEM 551  Advanced Organic Chemistry  
Three Hours: 3 Credits  
Emphasis will be on the structure, synthesis and bonding in organic compounds, reaction mechanisms (ionic, free radical and concerted). Prerequisite: CHEM 204, 408.

CHEM 552  Organic Synthesis  
Three Hours: 3 Credits  
This course covers principles of reactions leading to carbon-carbon formation, functional group transformation, protecting groups and masked groups introduction. Strategies of skeletal structures of main classes of biologically interesting compounds will be covered. Prerequisite: CHEM 204, 408.

CHEM 553  Polymer Chemistry  
Three Hours: 3 Credits  
Principles of structural and physical properties of polymers, copolymers and block copolymers, characterization, degradation and stabilization of polymeric materials. Prerequisite: CHEM 204, 408.

CHEM 555  Natural Products Chemistry  
Three Hours: 3 Credits  
This course is designed to provide the students an understanding of structure, classes, biosynthesis, biological significance, and reactions of major classes of natural products such as carbohydrates, terpenoids, fatty acids, amino acids, antibiotics, and alkaloids. Recent synthetic strategies of natural products will be covered.

CHEM 561  Advanced Inorganic Chemistry  
Three Hours: 3 Credits  
Principles of chemical bonding in metals and nonmetals, ligand field theory, applications of group theory to chemical bonding, inorganic reaction mechanism. Prerequisite: CHEM 312, 309.

CHEM 562  Organometallic Chemistry  
Three Hours: 3 Credits  
The principles and chemistry of compounds containing carbon-metal bonds, their synthesis and reaction mechanisms. Prerequisite: CHEM 312.

CHEM 563  Bioinorganic Chemistry  
Three Hours: 3 Credits  
Structure and bonding of inorganic material with biological systems. Functional relationship and reactions. Prerequisite: CHEM 312 and CHEM 204.
CHEM 565  Special Topics in Inorganic/Organic Chemistry or Biochemistry  
Two Hours: 2 Credits  
Special topics course in inorganic, organic or biochemistry, which may be taken as an independent course. It covers current/frontier areas in inorganic, organic or biochemistry which may include specific areas in transition metals and non-metal chemistry, application of group theory to reaction mechanisms, trends in stereoechemical synthesis, pericyclic reactions, linear free energy relationship in organic chemistry, proteins and their structure-activity relationship, nucleic acid and their interactions with other biomolecules and their relationship to biomedical technology. Prerequisite: Graduate standing with consent of Instructor.

CHEM 571  Advanced Biochemistry  
Three Hours: 3 Credits  
Principles and chemistry of living matter, their metabolism and energetic transformations, lipid structure and membranes. Prerequisite: Chem. 304.

CHEM 572  Enzymology  
Three Hours: 3 Credits  
Structure and functions of enzymes, enzyme kinetics, competitive, noncompetitive and cooperative binding of substrates to enzymes, reversible and irreversible binding of substrates to enzymes. Prerequisite: CHEM 304, 571.

CHEM 573  Protein and Amino Acids  
Three Hours: 3 Credits  
Advanced study of proteins, their building blocks and structure. Function and chemistry of amino acids and proteins, synthesis and purification. Prerequisite: CHEM 304 and CHEM 571.

CHEM 581  Advanced Techniques in Chemistry  
Four Hours: 4 Credits  
Topics to be covered include modern synthetic methods in inorganic and organic chemistry, qualitative and quantitative analysis of reaction products using absorptiometric, fluorometric, electrochemical, separation and various other optical techniques. This is a hand on course that emphasizes the proficiency of students in the general research techniques/instrument usage in chemical sciences. Prerequisite: CHEM 314, 312, and 408.

CHEM 600  Advances in Biochemistry  
Three Hours: 3 Credits  
Rigorous treatment of molecules of biological importance, their fundamental applications to the understanding of human function and the environmental effects on their activity. Topics covered include the general structure, function and energetics of proteins, enzymes, carbohydrates and the nucleic acids with emphasis on their utilization by living organisms, their impact on environment and other recent health related applications. Prerequisites: CHEM 570/573 or Consent of Instructor.

CHEM 601  Environmental Chemistry  
Three Hours: 3 Credits  
This environmental chemistry course is a course designed to introduce students to the importance of chemistry in solving the myriad of environmental problems in the universe — the atmosphere, biosphere, geosphere, hydrosphere and the anthrosphere. Most of the pollutants are man-made during the normal cause of daily activities. Environmental chemistry studies the production of pollutants, their distribution in the environment, overall health effects and their remediation using chemical knowledge and its attendant techniques. Prerequisite: CHEM 204, MATH 114 or equivalent, CHEM 207 or permission of the Instructor.

CHEM 602  Pollutants in the Environment  
Three Hours: 3 Credits  
This course involves a rigorous treatment of materials and particulates that contribute to environmental hazards. Their origin and production will be covered in great depth. Rigorous quantitative methods of analysis and the general instrumental techniques will be covered. Prerequisite: CHEM 314 and/or CHEM 601.
CHEM 603 Physical Chemistry of Environmental Sciences
Three Hours: 3 Credits
This course will cover the importance of fundamental thermodynamics and kinetics in the treatment of environmental problems. Topics covered will include first, second and third laws of thermodynamics, phase transformations, free energy changes, equilibrium, transport phenomena, catalysis. Prerequisite: CHEM 308 or equivalent.

CHEM 604 Analytical Techniques in Environmental Chemistry
Three Hours: 3 Credits
This course covers the fundamental analytical methods used in the determination of both trace and bulk materials of chemical interest. Such techniques include errors in analysis and their propagation. Significance testing and ANOVA and Monte Carlo technique, optimization and computer simulations will be covered. Emphasis will be on the analysis of environmental pollutants. Prerequisite: CHEM 314 and/or CHEM 533.

CHEM 605 Atmospheric Chemistry
Three Hours: 3 Credits
Chemistry of the lower atmosphere (troposphere and stratosphere) including photochemistry, kinetics, thermodynamics, box modeling, biogeochemical cycles and measurement techniques for atmospheric pollutants; study of important impacts to the atmosphere which result from anthropogenic emissions of pollutants, including acid rain, the greenhouse effect, urban smog and stratospheric ozone depletion. Prerequisite: CHEM 602 and CHEM 603.

CHEM 788, 789 Supervised Research in Chemistry
8 Credit Hours/4 Hours Each
These are research courses designed to enable students to participate in research in the areas of their competence under the supervision of qualified faculty members. Students are required to submit oral presentations of research findings in seminars and to submit a written thesis report to the graduate faculty.

CHEM 790 Graduate Seminar
Two Hours: 2 Credits
This course explores in-depth reviews of modern scientific topics in chemistry. It enables students engaged in this course to review the literature and provide discussions on the topics.

CHEM 797 Thesis Guidance
Two Hours: 2 Credits

CHEM 798 Thesis Research
Three Hours: 3 Credits

CHEM 799 Thesis Seminar
Three Hours: 3 Credits
DEPARTMENT OF PHYSICS

EASC 521  Earth and Planetary Science
Four Hours: 3 Credits
An overview of earth systems with emphasis on energy sources, earth system cycles, their interactions, and change with time. The solid earth, hydrosphere, and atmosphere will be studied using basic chemical and physical principles. The course will include lecture and laboratory. Prerequisite: Consent of instructor.

EASC 524  Planetary System Science
Four Hours: 3 Credits
A comprehensive study of planetary systems with emphasis on chemical and physical processes that formed and influenced members of the planetary system. In addition to the inner and outer solar system planets, the course will also discuss the primitive objects in the solar system comets, asteroids, and meteorites. Prerequisite: Consent of instructor.

PHYS 500  Mathematical Methods in Physics
Three Hours: 3 Credits
A study in matrices, tensors, linear transformations, complex variables, Fourier and Laplace transformations with applications to physics. Prerequisite: Consent of instructor.

PHYS 511  Classical Mechanics
Three Hours: 3 Credits
Lagrangian and Hamiltonian mechanics, normal modes, phase space, non-linear mechanics, numerical methods, stability. Prerequisite: Phys 500.

PHYS 523  Nuclear Physics & Radioactivity
Three Hours: 3 Credits
The course is structured to develop an in-depth understanding of nuclear physics and radioactivity. Topics considered are nuclei, radioactivity, and nuclear models. Prerequisite: Phys 528 or consent of instructor.

PHYS 524  Special Relativity & Elementary Particles
Three Hours: 3 Credits
The course is structured to develop an in-depth understanding of special relativity and elementary particles. Prerequisite: Phys 528 and consent of instructor.

PHYS 525  Computational Physics
Four Hours: 3 Credits
This course is designed to teach computer simulation of processes that occur in nature and visualization of scientific data using a computer. Prerequisite: Phys 500.

PHYS 526  Biophysics
Four Hours: 3 Credits
A survey of photobiology, bioenergetics, and physical methods currently used in biomedical research and practice, including microscopy, UV-visible spectrophotometry, diffraction, and physical separation techniques. Prerequisite: Consent of instructor.

PHYS 527  Fundamentals of Acoustics
Four Hours: 3 Credits
This course presents the physical and mathematical principles underlying the generation, transmission and reception of acoustic waves. Selected topics in architectural, environmental, industrial, and underwater applications are also considered. Prerequisite: Phys 500 or consent of instructor.
PHYS 528 Quantum Mechanics I
Three Hours: 3 Credits
Fundamental concepts in quantum mechanics, quantum dynamics and solutions of the Schroedinger equation, the representation of dynamical variables as operators and matrices, and symmetry in quantum mechanics. Prerequisite: Phys 500.

PHYS 529 Quantum Mechanics II
Three Hours: 3 Credits
Approximation methods in quantum mechanics, quantum mechanical effects of identical particles and scattering theory. Prerequisite: Phys 528.

PHYS 530 Solid State Physics
Three Hours: 3 Credits
Crystal structure, crystal binding, crystal vibrations, thermal properties, free electron gas, band structure of solids, metals, semiconductors, dielectric and optical properties of insulators, and magnetic properties. Prerequisite: Phys 528.

PHYS 531 Electromagnetic Theory
Three Hours: 3 Credits
Electrostatics and boundary value problems, magnetic fields, Maxwell’s equation, electromagnetic waves in dielectrics, metals and crystals, wave guides, radiation, potentials, and multipoles. Prerequisite: Phys 500.

PHYS 535 Survey of Current Materials Physics
Three Hours: 3 Credits
Crystallography, diffraction and microscopy techniques, defects, diffusion, phase diagrams, order-disorder transformations, interfacial phenomena, nucleation, and solidification. Prerequisite: Consent of instructor.

PHYS 788, 789 Supervised Research in Physics
Four Hours: 4 Credits each course
These are research courses designed to enable students to participate in research in the areas of their competence under the supervision of qualified faculty members. Students are required to submit oral presentations of research findings in seminars and to submit a written thesis report to the graduate faculty.

PHYS 790, 791 Seminars in Physics
One Hour: 1 Credit each course
This course explores in-depth reviews of modern scientific topics in physics. It enables students engaged in this course to review the literature and provide discussions of the topics. A comprehensive study of planetary systems with emphasis on chemical and physical processes that formed and influenced members of the planetary system. In addition to the inner and outer solar system planets, the course will also discuss the primitive objects in the solar system comets, asteroids, and meteorites.

PHYS 797 Thesis Guidance
Two Hours: 2 Credits
This course explores in-depth the thesis topic the student is engaged. It enables the student to be on top of current research and current development in his/her research area.

PHYS 799 Thesis Seminar
Three Hours: 3 Credits
This course explores new advances in different areas of physics. It deals with new discoveries, methods, and techniques in different branches of physics. Topics in this course are not covered by other courses in the physics curriculum. The main focus of this course will be on frontier research and hot research topics in physics. It encourages participants to think broadly about developments in Contemporary physics and seeks to develop competence in the applications of new methods and techniques in their research.
DEPARTMENT OF MATHEMATICS

MATH 501  Set Theory and Related Topics
Three Hours: 3 Credits
A study of axioms and operations, relations and functions, construction of real numbers, cardinal numbers, the Axiom of Choice, ordering and ordinals, other types, and special topics.

MATH 505  Abstract Algebra I
Three Hours: 3 Credits
A study of groups, subgroups, homomorphisms, factor groups, products, Sylow's Theorem, symmetric groups, free groups, ring homomorphisms, ideals, and quotient rings.

MATH 506  Abstract Algebra II
Three Hours: 3 Credits
A study of rings, ideals, maximal ideals, integral domains, polynomial rings, field of quotient of an integral domain, fields, vector spaces, field extensions, root of polynomials, finite fields, and special topics.

MATH 507  Ordinary Differential Equations
Three Hours: 3 Credits
A study of the modern theory of Ordinary Differential Equations and dynamic system including existence and uniqueness theorem, system of differential equations, variation of parameters, Laplace transform, stability of equilibrium solutions, stability of linear system, Phase-plane analysis, stable and unstable and center manifolds, and bifurcation theory.

MATH 512  Probability and Statistics
Three Hours: 3 Credits
A study of relation of probability and statistical theory to practical problems, probability theory, infinite sample spaces, random variables distributions, testing hypotheses, sampling, correlation and regression.

MATH 514  Applied Combinatorics and Graph Theory
Three Hours: 3 Credits
This course deals with applications of graph theory and combinatorics in the social and life sciences. Topics to be discussed include graph algorithms, transport networks, RNA structures.

MATH 517  Foundations of Geometry
Three Hours: 3 Credits
A study of the axiomatic method for development of geometrical systems, the axioms of Euclid and Hubert, topics in Euclidean geometry, geometry of four dimensions, and plane hyperbolic geometry.

MATH 518  Modern Geometry
Three Hours: 3 Credits
An introduction to various types of geometries as developed from sets of assumptions. Finite geometries, topics from Euclidean, projective and non-Euclidean geometries. Consideration of synthetic and analytic approaches.

MATH 521  Real Analysis I
Three Hours: 3 Credits
A study of the real number system, metric spaces, functions, sequences, limits, continuity, point sets, differentiation, and integration. Emphasis will be on basic ideas rather than the manipulative techniques of calculus.

MATH 522  Real Analysis II
Three Hours: 3 Credits
A continuation of MATH 521 to include transcendental functions, infinite series, expansion of functions, and convergence.
MATH 523  Measure Theory  
Three Hours: 3 Credits  
A study of the set algebra and set operations, set functions, convergence of measure sequences, measure spaces and Lebesgue-Stieltjes measure, measure functions, convergence in measure and almost everywhere convergence, and signed measures.

MATH 525  Theory of Numbers  
Three Hours: 3 Credits  
A study of fundamental laws, linear-diophantine equations, property of integers congruencies, Theorems of Fermat and Wilson, quadratic residues.

MATH 527  Complex Analysis  
Three Hours: 3 Credits  
A study of complex numbers, analytic functions, elementary functions, integrals, power series, residues and poles, and mappings.

MATH 541  Point Set Topology I  
Three Hours: 3 Credits  
A study of properties of metric and topological spaces, continuous functions, and applications to Euclidean spaces.

MATH 542  Point Set Topology II  
Three Hours: 3 Credits  
A continuation of MATH 541 to include axioms, quotients and products, compactness and connectedness, metrization, Stone-Cech compactification, and paracompact spaces.

MATH 551  Algorithms and Computations I  
Three Hours: 3 Credits  
A study of features and basic data structures of a high-level programming language. Algorithm construction and methods for evaluating efficiency of algorithms are studied.

MATH 552  Algorithms and Computations II  
Three Hours: 3 Credits  
A study of techniques in design and analysis of computations; algorithms are developed and applied. The data structures which enhance algorithm design and implementation are studied. Implementation is done in high-level language capable of structured, modular programming.

MATH 553  Computational Mathematics  
Three Hours: 3 Credits  
A study of numerical techniques for the solution of problems arising in biological and physical sciences including the treatment of typical problems in applications with special emphasis on the type of data encountered in practice.

MATH 555  Introduction to Functional Analysis  
Three Hours: 3 Credits  
This course is designed to introduce the students to the modern theory of Functional Analysis. Topics discussed include: Linear mappings; Metrization; Seminorms and local convexity; completeness; The Hahn-Banach Theorem; Weak Topologies; Duality in Banach Spaces; Hilbert Spaces and Operators on Hilbert space; and some applications.

MATH 557  Foundation of Harmonic Analysis  
Three Hours: 3 Credits  
This course is designed to introduce the students to various topics related to tools, techniques and applications of the theory of Harmonic Analysis. Topics to be discussed include: Fourier series on T; Convergence of Fourier series; Interpolation of Linear operators; Fourier transforms on the line; Fourier Analysis on local compact Abelian groups; Almost Periodic Functions.
MATH 559  Numerical Analysis  
Three Hours: 3 Credits  
This course is designed to derive and apply techniques of numerical analysis and computational mathematics. Topics include: arithmetic and well-posed computations; Gaussian elimination; functional iteration for a single equation and for a system of equations; computation of eigenvalues and eigenvectors; Weierstrass’ approximation theorem; the pointwise error in interpolation polynomials; Hermit interpolation and Chebyshev polynomials; finite elements method.

MATH 561  Mathematical Modeling  
Three Hours: 3 Credits  
The course is designed to study the formulations of abstract mathematical models for real phenomena. It provides an introduction to the theory of model construction as a formal system, examines a variety of applications of the theory and provides practice in the building models.

MATH 575  Introduction to Partial Differential Equations  
Three Hours: 3 Credits  

MATH 631  Biostatistics  
Three Hours: 3 Credits  
A first course in statistics with emphasis on applications in biological and health sciences, including organizing and summarizing data, basic probability, probability distributions, sampling distributions, drawing inferences from population samples via estimation and significance tests, linear regression, analysis, analysis of frequencies, vital statistics, and exposure to analysis of variance. Students will perform computer projects via statistical software system.

MATH 632  Advanced Biostatistics  
Three Hours: 3 Credits  
A continuation of MATH 631 with emphasis on analyzing data arising in the health and life sciences to include advanced inferential statistical methods, analysis of variance, simple and multiple regression and correlation analysis, chi-square analysis of frequencies, and nonparametric statistical methods.

MATH 633  Applied Regression and Correlation Analysis  
Three Hours: 3 Credits  
The study of relationships among variables, including linear regression with one or more independent variables, methods of estimating parameters and testing hypotheses, diagnostics and remedial measures, selection of independent variables via stepwise and other forms of regression techniques, model building, nonlinear regression, and time series.

MATH 788-789 Supervised Research  
Six Hours: 3 Credits each course  
These courses are designed to enable students to participate in research in areas of their competence under the supervision of qualified individuals. Students are required to submit research findings orally in a seminar and to submit a written report to the graduate faculty.

MATH 797  Thesis Guidance  
3 Hours: 2 Credits  
MATH 799  Thesis Seminar  
Three Hours: 3 Credits
DOCTOR OF PHILOSOPHY HIGHER EDUCATION

SCHOOL OF EDUCATION & URBAN STUDIES

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DEPARTMENT OF ADVANCED STUDIES, LEADERSHIP AND POLICY

DOCTOR OF PHILOSOPHY - HIGHER EDUCATION (Ph.D)

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Mission
The Ph.D. Program in Higher Education at Morgan State University is a research doctorate in higher education as a field of study, which is designed for those persons whose interests are primarily related to high quality professional preparation to pursue career fields in which research and other scholarly skills are absolutely essential. As an essentially competency-based program that focuses more on learning than the mere accumulation of credits, the Ph.D. in Higher Education Program has as its broad mission the preparation of professors, scholars, policy analysts, and administrators who can assume leadership roles in either the public or private sector.

Program Objectives
To provide a strong but flexible research oriented doctorate in higher education as a field of study, especially for practicing professionals interested in attaining or improving their positions as professors, researchers and policy analysts in the public and private sectors of higher education.

To strengthen and enhance the research capacity of the University and its ability to broaden its higher education research agenda.

To offer advanced educational opportunities for practicing professions that want to improve their competencies in the field but who may not be interested in pursuing the degree.

To strengthen the University’s efforts in the area of diversity and its competitive advantage, particularly in recruiting, admitting and graduating students from all racial, ethnic and cultural backgrounds.

To complement existing doctoral programs, especially to assure more collaborative and cooperative research across educational levels.

To provide an additional level of competencies for those persons whose goal is college/university administration.
DOCTOR OF PHILOSOPHY HIGHER EDUCATION

Special Admissions Requirements
Official transcripts of all academic work completed at other regionally accredited institutions of higher education, with a GPA of 3.0 or better on a 4.0 scale for the last two years of undergraduate work; and a GPA of 3.5 or better on all postgraduate study beyond the baccalaureate degree.

Official results of national entrance examinations such as GRE (verbal and quantitative sections), the MAT or the GMAT.

International students, whose native language is not English, must provide a TOEFL score of 550 or higher and demonstrate through the required written documentation and interview that they have requisite verbal and analytical skills needed to successfully complete the program.

2-3 page written statement of applicant’s philosophy and career goals in higher education.

A current resume or curriculum vita, documenting professional experiences.

Samples of professional writing, including publications and research proposal abstracts, if available. Personal interview.

Residency Requirements
Part-time candidates for the Ph.D. degree will satisfy residency requirements by completing 18 credit hours over a period of three consecutive semesters (not including summer). Full-time doctoral candidates must complete two consecutive semesters, carrying 9 credit hours each semester, to satisfy residency requirements. Upon completion of the course requirements and the comprehensive examination, the candidate must complete RDHE 998-Dissertation Seminar (6 credits) and RDHE 999-Dissertation Project (6 credits), and continue to register for RDHE 997-Dissertation Guidance (3 credits) each semester until the dissertation has been successfully defended.

All requirements for the Ph.D. degree must be completed within a period of seven consecutive years. The granting of a leave of absence by the School of Graduate Studies does not automatically extend this time limit.

General Requirements
The 72-credit hour (minimum) curriculum includes five principal components:

Research Core (18 credit hours of advanced course work in quantitative and qualitative methodology and collaborative field research modules when appropriate): These hours do not include the expectation that matriculated student’s present evidence of at least three credit hours in basic statistical analysis. This number (18 credit hours) represents a minimum and a student could expect to take additional research hours depending upon levels of competency upon admission, as well as upon what will eventually be the methodology required for the successful completion of the dissertation project.

All students enrolled in the Ph.D. in Higher Education program path are expected to become competent researchers. Therefore, the program design includes a significant requirement for both quantitative and qualitative research methods. The design also assumes that students admitted will demonstrate competence in basic statistics. Students who do not demonstrate such competence and ability will be required to take an appropriate general survey course in basic statistical methods. It is understood that the general survey course will not count toward the 18 credit hours (minimum requirement) for the research core.

The 18 credit hours (minimum requirement) must consist of at least the following:

Quantitative Methods (Two graduate-level statistics courses): Course work in experimental and non-experimental design and multivariate techniques constitutes part of the requirements. Also recommended are advanced courses designed specifically to develop expertise with statistical techniques commonly used in educational research. However, other equivalent courses from other disciplines may be substituted. The Program will maintain a list of approved graduate-level courses that are offered by other departments of the University.
Qualitative Methods (Two graduate-level courses): Courses that familiarize students with qualitative approaches to research (e.g., action research, case studies, and ethnographic studies) will be offered on an alternate semester basis by faculty in the School of Education and Urban Studies and through other programs under the auspices of the School of Graduate Studies. The emphasis will be on qualitative methods used in the educational and social sciences.

Dissertation-Related Research Methods (At least one graduate-level course): Students will be required to take at least one graduate course focused on methods of inquiry or statistics that are related to their area of concentration and/or dissertation research project.

Research Practicum (This is a required 3 credit-hour course in research – RDHE 889): Students are required, before being admitted to candidacy and undertaking their dissertation projects, to demonstrate their ability to design and conduct research. The practicum provides the student the opportunity to complete the prospectus for the dissertation. For the majority of students this will mean the preparation of the first three chapters of the traditional dissertation; however, if another option for the dissertation is chosen, the prospectus will also reflect those differences.

Field Research (One 3 credit-hour course RDHE 789: Field Research in Higher Education): This course requires research among higher education entities, such as American Council on Education, Middle States Accreditation Association, and the American Association of Community Colleges. The Field Research in Higher Education course provides an opportunity for the student to directly experience the research process prior to the dissertation and a chance to gain entrance to professional networks that are important to the students' career advancement. Alternatively, students can submit single authored higher education-related research that they completed prior to admission for faculty review and a waiver of the Field Research may be given based on this review.

The following courses must be successfully completed to meet the Research Core requirements:

- **EDSR 604** Introduction to Research Methods (3 credits)
  - This course is a prerequisite and does not count toward satisfying the 72 hour requirement for the Ph.D. in Higher Education degree. Students are required to demonstrate competence in basic statistical methods. This prerequisite may also be met on the basis of equivalent courses.
- **EDSR 624** Qualitative Research Methods in Education (3 credits)
- **EDSR 628** Applied Social Research (3 credits)
- **EDSR 719** Quantitative Data Analysis I (3 credits)
- **EDSR 818** Advanced Qualitative Research Methods (3 credits)
- **EDSR 819** Quantitative Data Analysis II (3 credits)
- **EDSR 889** Research Practicum in Higher Education (3 credits)

Additional research courses may be selected from the following list along with approved graduate courses from other disciplines:

- **EDSR 580** Measurement and Evaluation (3 credits)
- **EDSR 739** Management and Analysis of Large Data Sets (3 credits)
- **EDSR 829** Advanced Qualitative Research: Field Research (3 credits)
- **EDSR 789** Field Research in Education (3 credits)

Required Course Work in Cognate Discipline Fields (12 hours minimum): Fields include but are not limited to the social and behavioral sciences, business, economics, engineering or additional courses as electives in higher education. The Department of Advanced Studies, Leadership and Policy and the student’s advisor will work collaboratively with other academic units of the University (which relate directly to higher education as a field of study) to develop appropriate cognate courses to serve the Ph.D. in Higher Education Program.
As indicated above, the Ph.D. in Higher Education requires a minimum of 12 credit hours be taken in cognate disciplines. The rationale for the requirements is based on the assumption that students derive the most benefit from course work in one or two closely related disciplines or fields that share some common theoretical base and methods of inquiry. Where appropriate, courses from previous advanced study (e.g., Master’s degree) may be used to satisfy the cognate requirement. However, most students will need to take additional cognate work that is related to their current programs of study and to their proposed research areas. Typically students will choose cognate work at the graduate level in disciplines such as sociology, economics, history, engineering, business, psychology, and mathematics, among others. Students whose previous graduate study has not been in higher education may be required to take additional courses in higher education from those courses listed as electives. Consequently, the theoretical frameworks and research methods used to examine issues will often be shared across and within disciplinary lines. Frequently, elements of different theories are suggested to create interdisciplinary frameworks and models that are more explanatory and appropriate to the phenomenon of interest.

Foundations Course Work in Higher Education (24 credits minimum): Foundations courses include historical foundations of higher education, diversity and multiculturalism, organization theory and higher education administration, quality assurance and accountability in higher education, pro-seminar in higher education, and higher education policy analysis. An additional six hours must come from electives.

The Program requires a minimum of 24 credit hours of work in Higher Education as a field of study. Unless students have been awarded transfer credit or waivers of courses as a result of their pre-assessments at entry, students must take six (6) additional required foundations courses and two (2) electives.

Following are the six required Foundations courses:

- **RDHE 701** Pro-Seminar in Higher Education (3 credits)
- **RDHE 702** Historical Foundations of Higher Education (3 credits)
- **RDHE 703** Diversity and Multiculturalism in Higher Education (3 credits)
- **RDHE 704** Higher Education Policy Analysis (3 credits)
- **RDHE 705** Quality Assurance and Accountability in Higher Education (3 credits)
- **RDHE 722** Organizational Theory and Administration/Management in Higher Education (3 credits)

Two Electives (minimum of 6 credit hours) are to be chosen from among the following courses:

- **RDHE 720** Contemporary Issues & Concepts in Higher Education (3 credits)
- **RDHE 725** The American College Student (3 credits)
- **ASLJ 601** Legal Aspects of Education (3 credits)
- **RDHE 731** Governance and Coordination in Higher Education (3 credits)
- **ASLC 602** Curriculum, Instruction & Assessment in Higher Education (3 credits)
- **RDHE 735** Student Affairs Administration in Higher Education (3 credits)
- **ASLF 601** Educational Economics and Finance (3 credits)
- **RDHE 738** Institutional Research & Planning in Higher Education (3 credits)
- **ASLP 601** Politics of Education (3 credits)
- **RDHE 745** Student Development Theory and Research (3 credits)

The division of courses into Required and Electives is not intended to imply any priority of ordering with respect to their importance in the preparation of higher educational professionals. It is rather recognition that the clientele for this program would consist largely of practicing professionals many of whom would have had prior exposure to the concepts dealt with in some of these courses. Such courses were made elective. Courses specific to the field of higher education were made compulsory. For example, the concepts of EDSR 739 – Management and Analysis of
Large Data Sets while germane to the practice of Higher Education are likely to have been treated in other courses; the course is therefore an elective. Individual students may be advised as to electives they should take on the basis of their pre-entry assessment. The courses selected as compulsory are reflective of important contemporary issues in higher education and seek to take account of the social, political and cultural milieu in which higher education occurs. In this respect the program has a unique emphasis and one that is in keeping with the mission of Morgan State University.

**Modular “Signature” Courses** (6 one-credit seminars): These courses involve specialty topics designed to enhance the knowledge, skills and abilities of doctoral students. Through faculty or student request, courses may be added such as those that address deficiencies in topics as grant proposal writing, enrollment management, outcomes assessment, or scholarly writing. The program would facilitate the student’s acquisition of these skills through traditional or asynchronous methods.

It is necessary to underscore the importance of the knowledge, skills, and abilities successful applicants bring to Morgan State University, and to utilize information about applicants to complement-not duplicate-the competencies they have attained. Thus, the rationale for the implementation of “signature” or “thematic” courses to enhance a student’s competencies and outcomes is that duplication will be minimized and the extra time can be used to strengthen other professional competencies and research skills of those matriculating in the program.

**Modular Courses:**

- **RDHE 691/Fall** Selected Topics in Higher Education Seminars (1 credit)
- **RDHE 791/Spring** Selected Topics in Higher Education Seminars (1 credit)
- **RDHE 891/Summer** Selected Topics in Higher Education Seminars (1 credit)

**Seminar Topic Examples:**

- Executive Leadership in Historically Black Colleges and Universities
- Concepts and Practices in Enrollment Management in Higher Education
- Classroom Assessment Strategies
- Competency-based Higher Education Initiatives
- Critical Thinking and Analysis
- High Stakes Testing and Achievement Gaps for Minorities in Higher Education
- Governance in Higher Education
- Ethics in the Academy
- Accreditation and Outcomes Assessment

**Dissertation** (12 credit hours including RDHE 998 – Dissertation Seminar and RDHE 999 – Dissertation Project): Students whose dissertation projects that extend beyond RDHE 998 and RDHE 999 will be required to register Fall and Spring semesters (but not during the Summer Sessions) for additional hours of dissertation (RDHE 997 - Dissertation Guidance) until the dissertation is successfully defended.

**Dissertation Courses—Sequence is:**

- RDHE 889 Research Practicum in Higher Education (3 credits)
- RDHE 998 Dissertation Seminar (6 credits) – Required
- RDHE 999 Dissertation Project (6 credits) – Required
RDHE 997  Dissertation Guidance (3 credits) – Required each semester until the dissertation is completed and successfully defended.

Ph.D. Program Path Design Elements: Other Requirements and Policies

Selection of Supervisory Committee

Students must select three professors to serve on their supervisory committee, two of whom must be from the Department of Advanced Studies, Leadership and Policy (although one of the two may be any MSU graduate faculty). If the student determines that there is a need to select an individual from outside the University, this individual must submit both a letter of agreement and a curriculum vita to the chair of the department for approval. This individual cannot serve as chair of the committee nor receive compensation from the University. All professors who serve on dissertation committees must be professors as designated by the University Graduate Council and must have departmental approval.

Comprehensive Qualifying Examination

The Comprehensive Qualifying Examination is an independent writing project required of all Ph.D. in Higher Education students. However, the department allows for a range of options to constitute the comprehensive qualifying examination. The examination is taken once the student has completed at least seventy-five (75) percent of all course work (54 hours), including at least four of the courses required in the research core. The examination covers the general area of higher education, the candidate’s area of concentration, and a question designed to assess the student’s ability to construct a research design or proposal.

The structure and content of the examination is related closely to the research topic for the dissertation. Thus, there is an assumption that students have read the literature widely and that students will use their critical thinking and writing skills optimally to produce the desired outcomes for the examination.

The following are specific guidelines and must be adhered to:

Each well-researched and documented essay must be at least 15-20 pages, double-spaced. Reference sections must contain a minimum of twenty (20) citations as appropriate to the substance of the dissertation.

Each publishable quality essay must be accompanied by an Executive Summary.

The examinee must prepare an outline of each essay’s content and include this information in the table of contents preceding each essay.

The essays should follow current APA publication style.

For style and formatting directions and information, the examinee will be provided Departmental examination instructions as part of the comps package.

The time period for completing the “Comprehensive Qualifying Examination” is six calendar weeks. Expectations for conduct are included in the School of Graduate Studies Handbook for Dissertation and Theses, “Responsible Academic Conduct and Ethical Research.” (see www.morgan.edu/academics/Grad-studies/pdf/DissThesis-Hand.pdf).

The presentation of three acceptable publishable quality research papers is followed by an oral examination. Scheduling an oral examination is the responsibility of the student’s dissertation chair in consultation with other members of the supervisory committee and the scheduled date must be confirmed with the Department.
Internship

Upon entrance to the Higher Education program, the student who has limited or no experience in higher education may be required to take the internship course (RDHE 885). Participation in the internship must occur before candidacy is conferred. The purpose of the internship is to provide the student with professional and/or research competencies that were identified as incomplete at the time of admittance to the program.

Internship Course: RDHE 789 Internship in Higher Education (3 credits)

Institutional Review Board Approval

Students must seek and obtain approval of the Morgan State University’s Institutional Review Board even in cases where the research may be exempt. The necessary forms can be obtained from the Office of Sponsored Programs and Research.

Preparation and Defense of Dissertation Proposal

After successfully completing the required Comprehensive Qualifying Examination, students must prepare and defend a proposal for the dissertation. Whatever methodological form the dissertation may take, it must be done on the basis of a thorough review of the literature. Typically, this will mean three chapters addressing the nature, background and scope of the problem, research questions, and hypotheses (for quantitative research); a literature review; and a methodological design, covering the specific research methods, subjects, instruments, and data interpretation. Once the proposal has the approval of the student's supervisory committee and the department chair, a publicly announced oral defense of the proposal is conducted.

Advancement to Candidacy

Upon successful defense of the comps and the dissertation proposal students may be advanced to candidacy for the degree and are considered doctoral candidates.

Preparation and Defense of Dissertation

The Ph.D. dissertation must demonstrate conclusively the ability of the student to conceive, design, conduct, and interpret independent, original, and creative research. It must attempt to describe significant original contributions to the advancement of knowledge and must demonstrate the student's ability to organize, analyze and interpret data. In most instances, a dissertation includes a chapter concerning the nature, background, and scope of the problem, along with a clear statement of purpose of the research, research questions, and hypotheses (for quantitative research); a provision for a comprehensive review of pertinent literature; a description of the methodology used in the study; results obtained; and a final chapter containing a critical interpretation of conclusions in relation to the findings of other researchers.

The completed dissertation project should be worthy of publication. Responsibility for writing and editing of the dissertation rests with the student, under the supervision of the chair of the student's supervisory committee. General guidelines for formatting and submitting dissertations are detailed in the School of Graduate Studies, Handbook for Dissertations and Theses, which may be downloaded from the School of Graduate Studies' website. Students must also have a working knowledge of the most recent version of the APA publication style manual.

The final defense of the dissertation is an oral exam conducted publicly during which the student presents the dissertation research to the supervisory committee. The presentation must be of highest academic quality. It is the responsibility of the chair of the supervisory committee to submit a letter to the department chair and the School of Graduate Studies affirming the successful defense of the dissertation, including a completed, and up-to-date plan of study.
Finally, the student must complete the administrative process for proper submission of the dissertation to the Graduate School.
Objective

The Community College Leadership Doctoral Program is designed to prepare students for senior level leadership roles within the community college setting. The intense program of study leading to a Doctor of Education Degree focuses on training professionals for the unique situations encountered by senior administrators in a community college. A major emphasis of the program is research relevant to the issues and concerns of community colleges.

Program Foundation

The Community College Leadership Doctoral Program offers students a stimulating, highly structured, year-round program of study. The Program is designed for working professionals who are committed to attaining a Doctor of Education Degree. Morgan's mission is to serve a multiethnic and multiracial student body and to help ensure that the benefits of higher education are enjoyed by a broad segment of the population. To help fulfill the University's mission, the Community College Leadership Doctoral Program provides a program of study that prepares students to emerge from the program equipped to handle the unique and diverse leadership challenges associated with leading 21st century community colleges. The College Leadership Doctoral Program is based on the belief that community college leadership requires the following specific knowledge base and competencies (American Association of Community Colleges, 2005):

Organizational Strategy
Resource Management
Communication
Collaboration
Community College Advocacy
Professionalism

Educational Learning Model

The Educational Leadership Learning Model used in the Community College Leadership Doctoral Program creates an environment that prepares students to take advantage of many professional opportunities available in the nation’s community colleges. Throughout the program of study, the learner investigates and works on issues relevant to community college leadership. Students work collaboratively in teams to research trends and issues and solve problems relating to community college leadership. Courses are offered year-round with classes meeting on Friday evenings and all day Saturday. Cohorts can complete the program requirements in three years if they follow the prescribed course pattern. The program of study promotes diversity and equity in all entities of the community college environment.

Admission Portfolio

Admission to the Community College Leadership Doctoral Program is approved each fall semester. Students are selected based on the following multiple criteria:
A complete application.
A statement of application indicating career goals, including information on the need for a Doctor of Education degree in meeting stated goals.
Official transcripts reflecting all academic work completed at a regionally accredited institution of higher education.

Scores on the Miller Analogies Test or the Graduate Record Examination (Test scores may not be more than five (5) years old from the date of application to the program).

Three letters of recommendation from people who are familiar with the applicant’s scholarship and leadership potential.

A personal interview with the Community College Leadership Doctoral Program Admissions Committee.

Completed supplemental application.

Willingness to matriculate through the program of study as a member of a cohort group.

Residency Requirements
Students enrolling in the Community College Leadership Doctoral Program must commit to participating in a Cohort Program. Participating in the first year of the program of study satisfies residency requirements.

General Requirements for Degree
All candidates for the Community College Leadership doctoral program must enter as a member of a cohort. Members of the Cohort must commit to this collaborative experience throughout the entire program of study.

All candidates must complete a minimum of sixty-three (63) credit hours at Morgan after admission to the program. Previously completed credits may not be used to reduce the minimum requirements.

All candidates must select a specialized internship or practicum in a community college. The internship must be approved by the Program Coordinator prior to beginning the internship.

After completion of twelve (12) credits, all new doctoral students in the Community College Leadership doctoral program will receive a 12 credit review. This review consists of a personal meeting with the Program Coordinator to review the student’s academic progress. At this time, the student and the Program Coordinator will make a determination as to the student’s academic standing and the student’s continuation in the program. All candidates for the Ed.D. degree in Higher Education must complete the requirements of the Community College Leadership doctoral program’s foundation courses before continuing in the program of study.

The Community College Leadership Program has a curriculum that has a structured sequence. Students who are not able to take a course or must drop a course must register for the course the following year. Please note that taking a course out of sequence may affect candidacy for the comprehensive examination and graduation since courses are only offered once a year.

All candidates must pass a written comprehensive examination during the scheduled date(s) set by the program coordinator. The comprehensive examination may be repeated only once. To be eligible to take the comprehensive examination, the student must have completed a minimum of 33 credit hours, have a GPA of 3.0 or higher, and cannot have any “I” or “F” grades.

Each candidate participating in the Community College Leadership doctoral program must submit a dissertation proposal by the end of the first year of study. All requirements pertaining to the eligibility to take the comprehensive examination is applicable toward the submission of the dissertation proposal. The entire dissertation committee must review the proposal, which must be completed to the satisfaction of the committee chairperson prior to continuing with the dissertation.

All candidates in Community College Leadership doctoral program must write and submit a dissertation. When the dissertation has been completed to the satisfaction of the committee chairperson, a dissertation defense will be scheduled during which the students must orally defend his or her work before the entire dissertation committee.

All requirements for the Ed.D. degree in Higher Education must be completed within a period of seven consecutive years. The granting of a leave of absence by the School of Graduate Studies does not automatically extend the time limit.
PROGRAM OF STUDY – Administrative Leadership

Foundation courses (Required)
EDHE 600 The American Community College
EDHE 601 Leadership and Administration of Community Colleges

Community College Specialization (Required)
EDHE 602 Professional Development Seminar for Careers in Community Colleges: Year I
ASLJ 601 Legal Aspects of Education
EDHE 604 Community College Finance & Budgeting
EDHE 605 Community College Planning & Management
EDHE 606 The Learning College
EDHE 607 Student Development in Community Colleges
EDHE 608 Technology in Contemporary Community Colleges
EDHE 609 Contemporary Issues in Community Colleges
ALSP 601 Politics of Education
EDHE 611 Professional Development Seminar for Careers in Community Colleges: Year 2
EDHE 615 The Community College Presidency
EDHE 616 Community College Trustees and Governing Boards
EDHE 617 Clinical Internship - The Community College Experience

EDSR 604 Introduction to Educational Research
EDSR 622 Advanced Methodology and Research
EDHE 627 Mixed Methods Research for Community College Leaders
EDSR 630 Educational Statistics

Dissertation (Required)
EDHE 997 Dissertation Guidance
EDHE 998 Dissertation (6 credits)

Optional Courses
EDHE 612 Public Policy Analysis (1 credit)
EDHE 613 Writing for Publication and Presentation (1 credit)

Unless otherwise indicated, all courses are 3 credits

PROGRAM OF STUDY – Instructional Leadership

Foundation courses (Required)
EDHE 600 The American Community College
EDHE 601 Leadership and Administration of Community Colleges

Community College Specialization (Required)
EDHE 602 Professional Development Seminar for Careers in Community Colleges: Year I
ASLJ 601 Legal Aspects of Education
EDHE 609 Contemporary Issues in Community Colleges
EDHE 606 The Learning College
EDHE 608 Technology in Contemporary Community Colleges

Instructional Specialization (Required)
EDHE 622 Issues in General Education
EDHE 625 Discipline Foundation
EDHE 626 The Scholarship of Teaching
EDHE 628 Assessing Student Learning
EDHE 630 Contemporary Instructional Theories and Practices for Community College Educators - Research Seminar I
EDHE 631 Contemporary Instructional Theories and Practices for Community College Educators - Research Seminar II
DOCTOR OF EDUCATION – COMMUNITY COLLEGE LEADERSHIP

EDHE 632  Community College Academic Discipline Practicum (6 Credits)

EDSR 604  Introduction to Educational Research
EDSR 622  Advanced Methodology and Research Design
EDSR 632  Introduction to Quantitative Methods
EDHE 627  Mixed Methods Research for Community College Leaders

Dissertation (Required)
EDHE 997  Dissertation Guidance
EDHE 998  Dissertation (6 credits)

Optional Courses
EDHE 612  Public Policy Analysis (1 credit)
EDHE 613  Writing for Publication and Presentation (1 credit)

Unless otherwise indicated, all courses are 3 credits
MATHEMATICS EDUCATION (Ed.D.)

Glenda Prime, Ph.D.
Graduate Coordinator, Mathematics & Science Education Programs
Jenkins Behavioral Science Building, Room 421
Tel: (443) 885-3780; Fax: (443) 885-8238
E-mail: glprime@moac.morgan.edu

Objectives

To prepare a cadre of teachers and administrative staff who are capable of providing instructional leadership and who possess skills in curriculum development and in research in the teaching and learning of mathematics.

To develop in participants a sensitivity to the characteristics and needs of urban students in general, and African-American students in particular, and to the peculiarities of urban environments and institutions, and the implications of these for the teaching and learning of mathematics in such settings.

To effect positive changes in the teaching and learning of mathematics at all levels of educational systems.

Admission

- Applicants seeking entry to the program must have:
  - A Master's degree in Mathematics or in Education. Applicants whose Master's degree is in Education must have earned at least an undergraduate degree in Mathematics.
  - Teacher certification is desirable.
  - Scores on Graduate Record Examination (GRE) or Miller's Analogy Test
  - Minimum undergraduate grade point average of 2.6 and a minimum graduate grade point average of 3.0
  - Classroom Teaching Experience: A minimum of 3 years of teaching experience is desirable.

General Requirements

Award of the degree is contingent upon completion of 63 credit hours of work inclusive of the Dissertation and the Practicum.

A minimum grade point average of 3.0 must be maintained throughout the program. Only courses in which a student has attained a grade of B or better will be counted towards the award of the degree. A student who receives a grade of C in more than 3 courses may be asked to discontinue the program.

Students holding part-time registration will be allowed to take a maximum of 9 credit hours of course work in any one semester. Students holding full-time registration must take a minimum of 9 credit hours per semester.

All candidates will be required to complete a practicum. The practicum will involve an intervention in some aspect of the teaching/learning of mathematics at a selected educational level.

All candidates must pass written and oral comprehensive examinations. Candidates shall become eligible to write the comprehensive examinations upon successful completion of 42 credit hours of course work, 8 credit hours of which should be mathematics content courses. Additionally, students must have removed any "I" or "F" grades in order to be eligible to write the comprehensives. A student who does not meet acceptable standards for any aspect of the comprehensive examination may be allowed to repeat the examination only once.

Each degree candidate must submit a dissertation. When the dissertation has been completed to the satisfaction of the Committee Chairperson, a dissertation defense will be scheduled during which the candidate must orally defend his/her work before the
entire Dissertation Committee.

All requirements for the Ed.D. degree must be completed within a period of seven (7) years. The granting of a leave of absence by the School of Graduate Studies does not automatically extend this limit.

**Residency Requirements**

Part-time candidates will satisfy residency requirements by completing eighteen (18) credit hours over consecutive semesters (not including summer). Full-time students will satisfy these requirements by completing two (2) consecutive semesters, carrying at least nine (9) credit hours each semester.

**Program of Study**

The program consists of 6 components from which students must complete 63-credit hours. The 6 components are:

- **A. Educational Foundations**
- **B. Research**
- **C. Mathematics Education**
- **D. Mathematics Content**
- **E. Dissertation**
- **F. Practicum**

The coursework components of the program are made up of CORE courses and ELECTIVES.

<table>
<thead>
<tr>
<th>Educational Foundations</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASLC 601 *Curriculum Theory &amp; Development</td>
<td>3</td>
</tr>
<tr>
<td>ASLL 601 *Learning Theory</td>
<td>3</td>
</tr>
<tr>
<td>ASLS 601 *Contemporary Issues in Urban Education</td>
<td>3</td>
</tr>
<tr>
<td>Other 600 Level Courses in the School of Education</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Research</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDSR 620 Action Research in Urban Education</td>
<td>3</td>
</tr>
<tr>
<td>EDSR 631 *Educational Statistics II (Inferential)</td>
<td>3</td>
</tr>
<tr>
<td>EDSR 622 *Quantitative Research Methods in Education</td>
<td>3</td>
</tr>
<tr>
<td>EDSR 624 *Qualitative Research Methods in Education</td>
<td>3</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Mathematics Education</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDMA 620 *History, Philosophy, &amp; Sociology of Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>EDMA 621 *Planning, Developing &amp; Evaluating the Mathematics Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>EDMA 630 Methods of Concept Development in Mathematics Education</td>
<td>3</td>
</tr>
<tr>
<td>EDMA 650 Professional Development &amp; Practice of Mathematics Teachers</td>
<td>3</td>
</tr>
<tr>
<td>EDMA 651 Seminar: Current Topics &amp; Trends in Mathematics Education</td>
<td>3</td>
</tr>
<tr>
<td>EDMA 660 Special Topics in Mathematics Education</td>
<td>3</td>
</tr>
<tr>
<td>EDSM 610 Student Learning, Thinking &amp; Discourse in Mathematics &amp; Science</td>
<td>3</td>
</tr>
<tr>
<td>EDSM 621 Communities of Inquiry</td>
<td>3</td>
</tr>
<tr>
<td>EDSM 630 *Assessment &amp; Evaluation in Science and Mathematics Education</td>
<td>3</td>
</tr>
<tr>
<td>EDSM 631 Issues &amp; Applications of Technology in Science &amp; Mathematics Education</td>
<td>3</td>
</tr>
<tr>
<td>EDSM 632 *Instructional Systems Analysis for Mathematics &amp; Science Education</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mathematics Content</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Four courses at the 500 level or above in the Mathematics Department</td>
<td>12</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Practicum</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDSM 641 Practicum in Mathematics and Science Education</td>
<td>3</td>
</tr>
</tbody>
</table>
DOCTOR OF EDUCATION – MATHEMATICS EDUCATION

Dissertation
EDSM 998  Dissertation Seminar
EDSM 997  Dissertation Guidance

* denotes CORE requirements
SCIENCE EDUCATION (Ed.D.)

Glenda Prime, Ph.D.
Graduate Coordinator, Mathematics & Science Education Programs
Jenkins Behavioral Science Building, Room 421
Tel: (443) 885-3780; Fax: (443) 885-8238
E-mail: glprime@moac.morgan.edu

Objectives

To prepare a cadre of teachers and administrative staff who are capable of providing instructional leadership and who possess skills in curriculum development and in research in the teaching and learning of science.

To develop in participants a sensitivity to the characteristics and needs of urban students in general and African-American students in particular, and to the peculiarities of urban environments and institutions and the implications of these for the teaching and learning of science in such settings.

To effect positive changes in the teaching and learning of science at all levels of educational systems.

Admission

- Applicants seeking entry to the program must have:
  - A Master's degree in Science or in Education. Applicants whose Master's degree is in Education must have earned at least an undergraduate degree in Science.
  - Teacher certification is desirable.
  - Scores on Graduate Record Examination (GRE) or Miller's Analogy Test
  - Grade Point Average Undergraduate: minimum of 2.6. Graduate; minimum 3.0
  - Classroom Teaching Experience: A minimum of 3 years of teaching experience is desirable.

General Requirements

A minimum grade point average of 3.0 must be maintained throughout the program. Award of the degree is contingent upon completion of 63 credit hours inclusive of the Dissertation and the Practicum. Only courses in which a student has attained a grade of B or better will be counted towards the degree. A student who receives a grade of C in more than 3 courses may be asked to discontinue the program.

Students holding part-time registration will be allowed to take a maximum of 9 credit hours of course work per semester. Students holding full-time registration will be required to take a minimum of 9 credit hours per semester.

All candidates will be required to complete a practicum. The practicum will involve an intervention in some aspect of the teaching/learning of science at a selected educational level.

All candidates must pass written and oral comprehensive examinations. Candidates shall become eligible to sit for the comprehensive examinations upon successful completion of 42 credit hours of course work, 8 credit hours of which should be science content courses. Additionally, students must have removed any "I" or "F" grades. A student who does not meet acceptable standards for any aspect of the comprehensive examination may be allowed to repeat the examination only once.

Each degree candidate must submit a dissertation. When the dissertation has been completed to the satisfaction of the committee chairperson, a dissertation defense will be scheduled during which time the candidate must orally defend his/her work before the entire dissertation committee.

All requirements for the Ed.D degree must be completed within a period of seven (7) years. The granting of a leave of absence
by the School of Graduate Studies does not automatically extend this limit.

**Residency Requirements**
Part-time candidates will satisfy residency requirements by completing eighteen (18) credit hours over consecutive semesters (not including summer). Full-time students will satisfy these requirements by completing two (2) consecutive semesters carrying at least nine (9) credit hours each semester.

**Program of Study**
The program consists of 6 components from which students must complete 63 credit hours.
The 6 components are:
A. Educational Foundations
B. Research
C. Science Education
D. Science Content
E. Practicum
F. Dissertation

The coursework components of the program are made up of CORE courses and ELECTIVES.

<table>
<thead>
<tr>
<th>Educational Foundations</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASLC 601 *</td>
<td>3</td>
</tr>
<tr>
<td>ASLL 601 *</td>
<td>3</td>
</tr>
<tr>
<td>ASLS 601 *</td>
<td>3</td>
</tr>
<tr>
<td>Other 600 level courses in the School of Education</td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Research</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDSR 620</td>
<td>3</td>
</tr>
<tr>
<td>EDSR 631</td>
<td>3</td>
</tr>
<tr>
<td>EDSR 622</td>
<td>3</td>
</tr>
<tr>
<td>EDSR 624</td>
<td>3</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Science Education</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDSC 611</td>
<td>3</td>
</tr>
<tr>
<td>EDSC 620</td>
<td>3</td>
</tr>
<tr>
<td>EDSC 621</td>
<td>3</td>
</tr>
<tr>
<td>EDSC 630</td>
<td>3</td>
</tr>
<tr>
<td>EDSC 650</td>
<td>3</td>
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<tr>
<td>EDSC 651</td>
<td>3</td>
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<tr>
<td>EDSC 660</td>
<td>3</td>
</tr>
<tr>
<td>EDSM 610</td>
<td>3</td>
</tr>
<tr>
<td>EDSM 621</td>
<td>3</td>
</tr>
<tr>
<td>EDSM 630</td>
<td>3</td>
</tr>
<tr>
<td>EDSM 631</td>
<td>3</td>
</tr>
<tr>
<td>EDSM 632</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Science Content</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Courses at 500 level or above in a Science Department of the School of Computer, and Mathematical and Natural Sciences</td>
<td></td>
</tr>
</tbody>
</table>
DOCTOR OF EDUCATION – SCIENCE EDUCATION

Practicum
EDSM 641 Practicum in Mathematics and Science Education 3

Dissertation
EDSM 998 Dissertation Seminar
EDSM 997 Dissertation Guidance

* denotes CORE course
URBAN EDUCATIONAL LEADERSHIP (Ed.D.)

Iola Ragins Smith, Ph.D.
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E-mail: ismith@jewel.morgan.edu

Objective
To provide an educational experience that will prepare doctoral candidates to assume leadership positions in urban school systems and other educational agencies as educational administrators and/or planners, researchers of social policy, fiscal officers, development officers, and facilities and operational analysts.

Admission to Program
Admission to the doctoral program is granted during each academic semester and is based on the following requirements:
• A master’s degree from a regional accredited college or university.
• A grade point average of 3.0 or above on all previous post-baccalaureate work
• Scores on the Miller Analogies Test or the Graduate Record Examination. (Test scores may not be more than five (5) years old from the date of application to the program)
• An interview by the Doctoral Program Admissions Committee.

General Requirements
All candidates for the Ed.D. degree in Urban Educational Leadership must complete a minimum of sixty-six (66) credit hours at Morgan State after admission to the program. Doctoral candidates will select a specialization in Educational Planning and Administration, or Administration and Social Policy. Each candidate will develop an individual program of study in consultation with an assigned faculty adviser.

All candidates must pass a written comprehensive examination. The comprehensive examination may be repeated once. To be eligible to sit for the comprehensives, the candidate must have completed a minimum of 42 credit hours, must have a cumulative GPA of 3.0, and must have removed any “I” or “F” grades.

Each Ed.D. degree candidate must submit a dissertation. When the dissertation has been completed to the satisfaction of the Dissertation Committee, a dissertation defense will be scheduled, during which the student must orally defend his or her work before the entire Dissertation Committee, and others as determined by the Chairperson of the Department.

All requirements for the Ed.D. degree must be completed within a period of seven consecutive years. The granting of a leave of absence by the School of Graduate Studies does not automatically extend the limit.

Residency Requirements
Part-time candidates for the Ed.D. degree will satisfy residency requirements by completing 18 credit hours over a period of three consecutive semesters. Full-time doctoral candidates must complete two consecutive semesters, carrying 9 credit hours each semester, in order to satisfy the residency requirements. Upon completion of the course requirements and the comprehensive examination, the candidate must continue to register for “Dissertation Guidance (EDUC 997)” each semester until the dissertation has been successfully defended.

Program of Study
Core Curriculum (18 Credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 507</td>
<td>Economics of Education</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 601</td>
<td>Theories and Practices of Urban Educational Leadership</td>
<td>3</td>
</tr>
<tr>
<td>ASLS 601</td>
<td>Contemporary Issues in Urban Education</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 501</td>
<td>Modern Philosophies of Education</td>
<td>3</td>
</tr>
<tr>
<td>ASLP 601</td>
<td>The Politics of Education</td>
<td>3</td>
</tr>
</tbody>
</table>
SOCI 560 Seminar in Urban Sociology 3

Credit Hours 18

Specializations
A. Administration and Educational Planning (15 Credits)
EDAD 602 Educational Planning and Management 3
EDAD 605* Clinical Studies/Internship: Educational Planning 3-6
EDAD 607 Administration of Public Educational Organizations 3
EDAD 620 Seminar in Administration and Educational Planning 3

Credit Hours 15

B. Administration and Social Policy (15 Credits)
ASLS 660 Urban Systems Analysis 3
EDAD 603* Clinical Studies/Internship: Administration & Social Policy 3-6
EDAD 630 Seminar in Administration and Social Policy 3
SFED 651 Social Policy and Futurism 3

*Course must be repeated for a maximum of 6 credits

Credit Hours 15

Research Concentration (15 Credits)
EDSR 620 Action Research in Urban Education 3
EDSR 622 Quantitative Research Methods in Education 3
EDSR 624 Qualitative Research Methods in Education 3
EDSR 630 Educational Statistics I (Descriptive) 3
EDSR 631 Educational Statistics II (Inferential) 3

Credit Hours 15

Cognate Studies/Electives (12 Credits)
1. EDSR 623 Application and Computer Utilization for Urban Education Leaders (Required 3
2. 3
3. 3
4. 3
5. ENGL 564 or 561 Writing Course (if required) 0

Credit Hours 12

Dissertation (Required)
EDUC 997* Dissertation Guidance 0
EDUC 998 Dissertation 6

*Continuous Registration

TOTAL CREDIT HOURS 66
EDUCATIONAL ADMINISTRATION & SUPERVISION (M.S.)

Flossie Windley, Ph.D.
Graduate Coordinator, Aspiring Leaders Program
Jenkins Behavioral Science Building, Room 316
Tel: (443) 885-1982; Fax: (443) 885-8243
E-mail: fwindley@moac.morgan.edu

Objective
The Master of Science degree program in Educational Administration & Supervision is designed to prepare qualified individuals for positions as principals, assistant principals, and instructional supervisors in elementary, middle and high schools.

Admission
For unconditional admission the applicant must also: possess an elementary or secondary school teachers’ certificate; submit scores on the Miller’s Analogy Test (MAT) or the Graduate Record Examination (GRE); and, be currently employed as a principal, supervisor, assistant principal, or department head.

For conditional admission the applicant must also: possess an elementary or secondary school teacher’s certificate; and, be currently employed as a principal, supervisor, assistant principal, or department head. All applicants must have a minimum of three (3) years of teaching experience.

Persons who are not currently working in administrative or supervisory positions may be considered for the program by submitting a letter of recommendation from an administrative or personnel officer who can attest to the applicant’s teaching effectiveness and leadership potential. The letter should be addressed to the Dean of the School of Graduate Studies and submitted with other application materials.

General Requirements
Thirty-nine (39) semester hours are required for the degree.
Students must complete the core program before beginning their area of concentration.
The practicum and the research seminar are required of all students and should be taken as the culminating experience in the program.
All candidates for the degree must pass a written comprehensive examination. This examination can be taken only after the student has completed twenty-seven (27) credits in the program, has a cumulative GPA of 3.0 and has no “1” or “F” grades.

Program of Study
Core Program (12 hours required)
The Core Program is designed to build humanistic and general skills including basic research skills, an understanding of basic principles of learning and instruction, and an understanding of basic principles of urban educational administration and supervision.

EDAD 555 Introduction to Urban Educational Administration and Supervision 3
ASLL 601 Human Development, Learning & Instructional Systems 3
EDSR 504 Introduction to Educational Research 3
SFED 510 Historical, Philosophical and Sociological Foundations of Urban Education 3
Credit Hours 12

Supervision and Curriculum (6 hours required)
This component develops skills in instructional supervision needed by both school-based administrators and supervisors.
ASLC 601 Curriculum Theory & Development 3
EDSU 560 Supervision & Evaluation of Curriculum & Instruction 3
Credit Hours 6
Concentrations

**A. Principals (15 hours required)**
This component focuses on the development of management, leadership, implementation, diagnostic, and evaluative skills for students aspiring to be assistant principals, or principals.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASLJ 601</td>
<td>Legal Aspects of Education</td>
<td>3</td>
</tr>
<tr>
<td>EDAD 558</td>
<td>School &amp; Community Relations &amp; Political Influences in Urban Schools</td>
<td>3</td>
</tr>
<tr>
<td>EDAD 585</td>
<td>The Role of the Principal, Assistant Principal, &amp; the Instructional Supervisor in the Urban School</td>
<td>3</td>
</tr>
<tr>
<td>GUCO 564</td>
<td>Diagnostic &amp; Prescriptive Procedures in Educational Planning &amp; Development</td>
<td>3</td>
</tr>
<tr>
<td>SPED 582</td>
<td>The Exceptional Child: Administration &amp; Program Needs</td>
<td>3</td>
</tr>
</tbody>
</table>

**Credit Hours 15**

**B. Supervisors (15 hours required)**
This component focuses on the development of management, leadership, implementation, diagnostic, and evaluative skills for students aspiring to be supervisors.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASLJ 601</td>
<td>Legal Aspects of Education</td>
<td>3</td>
</tr>
<tr>
<td>EDSU 561</td>
<td>The Role of the Instructional Supervisor in the Urban School</td>
<td>3</td>
</tr>
<tr>
<td>EDSU 570</td>
<td>Advanced Procedures in Instructional Supervision &amp; Curriculum Development</td>
<td>3</td>
</tr>
<tr>
<td>GUCO 564</td>
<td>Diagnostic &amp; Prescriptive Procedures in Educational Planning &amp; Development</td>
<td>3</td>
</tr>
<tr>
<td>SPED 582</td>
<td>The Exceptional Child: Administrative &amp; Program Needs</td>
<td>3</td>
</tr>
</tbody>
</table>

**Credit Hours 15**

**Application and Synthesis (6 hours required)**
This component is designed to provide practice in applying the knowledge and skills developed in the previously identified areas of the program. Since these experiences draw upon and apply previous knowledge, they should be taken at the culmination of the program.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDAD 795</td>
<td>Research Seminar in Problems &amp; Strategies in Urban School Administration &amp; Supervision</td>
<td>3</td>
</tr>
<tr>
<td>EDAD 798</td>
<td>Practicum in Educational Administration &amp; Supervision</td>
<td>3</td>
</tr>
</tbody>
</table>

**Credit Hours 6**

**TOTAL CREDIT HOURS 39**
EDUCATIONAL ADMINISTRATION & SUPERVISION - ASPIRING LEADERS PROGRAM

Objective
The Baltimore City Public Schools (BCPS) and Morgan State University have cooperatively developed a graduate program for staff members who possess a master’s equivalency as recognized by the Baltimore City Public Schools and a teaching license. This thirty-credit hour program may accept a cohort group of approximately twenty-five (25) students for a two-year (including one Summer session) master’s degree in educational administration. Each cycle (cohort group) will begin in the Fall and will end at the conclusion of the program (two years). Upon completing the program, participants will have completed requirements for Administrator I Certification (instructional supervisor) and will have attained an earned master’s degree. A person who has completed the program and has qualified for certification as Administrator I must have completed the Maryland Assessment Center Program or passed the Interstate School Leaders Licensure Assessment examination within a five-year period prior to initial appointment as a principal.

Target Audience
Individuals who have demonstrated potential for leadership including exceptional classroom teachers, department heads, master teachers, Admission Review Dismissal (ARD) managers, specialists and central office managers are invited to apply. Candidates must have a minimum of three years of successful teaching experience and possess a master’s equivalency.

PROGRAM OF STUDY Credit
Fall Semester
ASLJ 601 Legal Aspects of Education 3
EDSR 504 Introduction to Educational Research 3

Spring Semester
EDAD 585 Role of the Principal, Assistant Principal & the Instructional Supervisor in the Urban School 3
EDUC 515 Utilization of Computers in Teaching 3
ASLL 601 Learning Theory 3

Fall Semester
ASLC 601 Curriculum Theory and Development 3
EDSU 560 Supervision and Evaluation of Curriculum and Instruction 3

Spring Semester
EDAD 798 Practicum in Educational Administration and Supervision 3
SPED 582 The Exceptional Child: Administration and Program Needs 3

Total Credit Hours 30

The curriculum in the course work described above has been aligned with the Leadership Development Framework approved by the BCPS Superintendent’s cabinet. The curriculum has also been designed to meet the standards of the Interstate School Leaders Consortium. The course content for each semester has been outlined in joint planning sessions by representatives from BCPS and Morgan State. Students will develop portfolios that will reflect their experiences and serve as a basis for their continued professional development.

General Information and Requirements
The activities and projects in the practicum will be ongoing throughout three consecutive semesters. The practicum will require students to apply the knowledge and skills examined in classes to problems and opportunities available at school sites. Students will complete a series of activities which will familiarize them with nearly every aspect of administration at the school sites. A series of seminars will be conducted in which students can share their experiences and benefit from the presentations of practicing principals.
The program requires the successful completion of thirty (30) graduate credits over the five-semester course of the program. A total of six credits will be earned for successful work in each semester. Students must pass a comprehensive examination. Students in good standing are eligible to take the comprehensive examination upon completion of a minimum of twenty-one (21) credits.

Payment of current tuition and fees will be made directly to Morgan State University. Tuition reimbursement guidelines as outlined in the Baltimore Teachers Union (BTU) and Public School Administrators and Supervisors Association (PSASA) contracts will apply to this program. Financial aid is available to a limited number of students on a competitive basis. Students are encouraged to complete the application to enroll in the program. However, completion of the application does NOT guarantee that financial aid will be awarded. The decision to award financial aid is made by the School of Graduate Studies at Morgan State University.

Eligible Applicants
The student will: (1) be required to produce proof of a master’s equivalency, (2) be required to produce proof of an advanced professional certificate, (3) be required to produce proof that he/she is fully certified, (4) have completed a minimum of three years of successful teaching, (5) have at least a 2.5 undergraduate average and 2.5 in the major, (6) submit to an interview process and meet all other requirements as outlined in the current Morgan State University Graduate Catalog. The program is competitive and not all persons asked to interview will necessarily be accepted.

Application Process
Candidates must complete the preliminary application form and send it to the Aspiring Leaders Program Coordinator, Room 106, Samuel Banks Staff Development Center, by March of each program cycle. Candidates will be contacted for an interview in April and the program will begin in the Fall semester of each program cycle. The application procedure requires submission of the Official Final Application, completion of the interview, completion of a writing sample and submission of the Official Final Application to the School of Graduate Studies, Morgan State University. All applicants who complete these procedures by April 29 of each program cycle will be notified of the status (acceptance or rejection) by July. Only completed applications should be submitted to the Office of the School of Graduate Studies at Morgan State University.

A completed application includes: (1) The Morgan Application form, (2) three letters of recommendation (one from a supervisor who can attest to the applicant’s leadership potential), (3) official copies of the undergraduate and graduate transcripts, and (4) evidence that the applicant possesses a BCPS recognized master’s equivalency. The Coordinator of the Aspiring Leaders Program will arrange interviews. The completed applications with all letters of recommendation and official transcripts should be returned to: The School of Graduate Studies, Morgan State University, 1700 East Cold Spring Lane, Baltimore, Maryland 21251.

Practicum
The Practicum in Educational Administration and Supervision (EDAD 798) requires the completion of a series of activities in several areas of educational administration and a major, site-based, administrative project. Some of the activities include experiences in budgeting, scheduling, working with parents, working with school counselors and ARD members, assistant principals, and maintenance and cafeteria staff. The project is determined jointly by the principal, the practicum instructor and the student. The project must involve a major leadership activity at the school. The practicum will be supervised by the practicum instructor and by the principal or an assistant principal. During the practicum, the student will attend a series of seminars conducted to provide interaction among the practicum students and instruction on aspects of the practicum experience.
MATHEMATICS EDUCATION (M.S.)

Glenda Prime, Ph.D.
Graduate Coordinator, Mathematics & Science Education Programs
Jenkins Behavioral Science Building, Room 421
Tel: (443) 885-3780; Fax: (443) 885-8238
E-mail: glprime@moac.morgan.edu

Program Mission
The degree of Master of Science in Mathematics Education aims to fill the need to provide advanced preparation for certified mathematics teachers. Changes in societal demands brought about by advances in mathematics and technology, as well as sociocultural changes in the high school clientele make the continual re-tooling of mathematics teachers an absolute necessity. Through a curriculum which combines rigorous mathematics content knowledge with advanced research-based pedagogy, the program seeks to produce a highly competent cadre of mathematics teachers, who have the knowledge, skills and attitudes to foster a high level of achievement in mathematics in high school students. This program will produce teachers who have a sound knowledge of the discipline, are skilled in facilitating learning and have the competence to assess students' needs in mathematics and to modify their own instructional practices to meet those needs.

Objectives
Upon completion of these programs certified teachers will have acquired the competence and attitudes to:

- Draw on insights from cognitive psychology, the nature and philosophy of mathematics and on a sound level of subject matter knowledge, in order to design learning experiences that would result in meaningful acquisition of mathematics concepts by high school students.
- Use technology to enhance student learning in mathematics.
- Create classroom learning environments that are stimulating and intellectually and emotionally safe for diverse student populations of both genders.
- Model an enthusiastic engagement with mathematics and motivate students to excellence in these subjects.
- Be reflective about their own practice and seek to be responsive to changing student needs in a demanding society.

Special Admission Criteria
To be eligible for admission to the program, applicants must have completed a Bachelor’s Degree in Mathematics. Applicants must be certified in the teaching of mathematics at the middle or high school level.

General Degree Requirements
To be eligible for award of the Master of Science in Mathematics Education, a student must have completed 36 credit hours within one of two options. **Option A** includes 30 hours of course work, a school-based Practicum and a Master’s Degree Project. Option B includes 30 hours of coursework and a Master’s thesis.

A minimum grade point average of 3.0 must be maintained throughout the program. Students holding part-time registration will be allowed to take a maximum of 9 credit hours of course work per semester. The Masters Degree Project must be completed under the guidance of the student’s academic supervisor. The student must then pass an oral defense of the project. Students who select **Option B** will be assigned a thesis supervisor and a committee who will supervise the research and preparation of the thesis.

Program of Study

**Foundations of Education** (3 credit hours are required in this component).
EDUC 519 The Socio-cultural Context of Schooling (3 credits) OR
Other approved departmental course in the Foundations area.
Research
EDSR 604 Introduction to Educational research (3 credits).
EDSR 517 Action Research in the Classroom (3 credits).

Mathematics Education
EDMA 530 Teaching for Conceptual Development in Mathematics (3 credits)
EDSM 530 Assessment of Learning in Science and Mathematics (3 credits)
EDSM 631 Issues and Applications of Technology in Science and Mathematics Education (3 credits)

Mathematics
EDMA 553 Mathematics in the High School Curriculum 1 (3 credits)
EDMA 554 Mathematics in the High School Curriculum 11 (3 credits)
Two Mathematics Courses 500 level or above. (6 credits).

OPTION A
Practicum (3 credits)
EDSM 540 Practice of Mathematics and Science in Urban Classrooms

Masters Project (3 credits)
EDSM 500 Project in the Teaching of Mathematics or Science

OPTION B
Masters Thesis
EDSM 799 Thesis Seminar
EDSM 797 Thesis Guidance
SCIENCE EDUCATION (M.S.)

Glenda Prime, Ph.D.
Graduate Coordinator, Mathematics & Science Education Programs
Jenkins Behavioral Science Building, Room 421
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E-mail: glprime@moac.morgan.edu

Program Mission
The degree of Master of Science in Science Education aims to fill the need to provide advanced preparation for certified science teachers. Changes in societal demands brought about by advances in science and technology, as well as socio-cultural changes in the high school clientele make the continual re-tooling of science teachers an absolute necessity. Through a curriculum which combines rigorous science content knowledge with advanced research-based pedagogy, the program seeks to produce a highly competent cadre of science teachers, who have the knowledge, skills and attitudes to realize a high level of achievement in science in high school students. This program will produce teachers who have a sound knowledge of the discipline, are skilled in facilitating learning and have the competence to assess students’ needs in science and to modify their own instructional practices to meet those needs.

Objectives
Upon completion of these programs certified teachers will have acquired the competence and attitudes to:

• Draw on insights from cognitive psychology, the nature and philosophy of science and on a sound level of subject matter competence, in order to design learning experiences that would result in meaningful acquisition of science concepts by high school students.
• Use technology to enhance student learning in science.
• Create classroom learning environments that are stimulating and intellectually and emotionally safe for diverse student populations of both genders.
• Model an enthusiastic engagement with science and motivate students to excellence in these subjects.
• Be reflective about their own practice and seek to be responsive to changing student needs in a demanding society.

Special Admission Criteria
To be eligible for admission to the program, applicants must have completed a Bachelor’s Degree in Biology, Chemistry, Physics or other science discipline.
Applicants must be certified in the teaching of science at the middle or high school level.

General Degree Requirements
• To be eligible for award of the Master of Science in Science Education, a student must have completed 36 credit hours, inclusive of course work, a school-based Practicum and a Master’s Degree Project (Option A).
• A minimum grade point average of 3.0 must be maintained throughout the program.
• Students holding part-time registration will be allowed to take a maximum of 8 credit hours of course work per semester.
• The Master’s Degree Project must be completed under the guidance of the student’s academic supervisor. The student must then pass an oral defense of the project.
• Students who select Option B will be assigned a thesis supervisor and a committee who will supervise the research and preparation of the thesis.
Program of Study

Foundations of Education (3 credit hours are required in this component).
EDUC 519 The Socio-cultural Context of Schooling (3 credits) OR
Other approved departmental course in the Foundations area.

Research
EDSR 504 Introduction to Educational research (3 credits).
EDSR 517 Action Research in the Classroom (3 credits).

Mathematics Education
EDSC 530 Teaching for Conceptual Development in Science (3 credits)
EDSM 530 Assessment of Learning in Science and Mathematics (3 credits).
EDSM 631 Issues and Applications of Technology in Science and Mathematics Education (3 credits)

Mathematics
EDSC 553 Science in the High School Curriculum 1 (3 credits).
EDSC 554 Science in the High School Curriculum 11 (3 credits).
Two Science Courses 500 level or above. (6 credits).

OPTION A
Practicum (3 credits)
EDSM 540 Practice of Mathematics and Science in Urban Classrooms

Masters Project (3 credits)
EDSM 500 Project in the Teaching of Mathematics or Science

OPTION B
Masters Thesis
EDSM 799 Thesis Seminar
EDSM 797 Thesis Guidance
EDUCATIONAL ADMINISTRATION & SUPERVISION – CERTIFICATION PROGRAM

Iola Ragins Smith, Ph.D.
Graduate Coordinator, Teacher Education and Professional Development
Jenkins Behavioral Science Building, Room 300
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E-mail: ismith@morgan.edu

Objective
The Certification program is designed to prepare qualified individuals who already possess a master’s degree and a teaching certificate for certification by the Maryland State Department of Education as “Administrator I,” which qualifies an individual to be assigned as a school supervisor, or as “Administrator II,” which qualifies an individual to be assigned as a school principal.

Students who have not earned a master’s degree in education or in some other area, and a teaching certificate are not eligible for this program.

Admission
For unconditional admission, applicants must also: (1) have a master’s degree from a regionally accredited college or university; (2) have a minimum undergraduate academic average of not less than 3.0 in the major area of study; (3) have an elementary or secondary school teacher’s certificate; (4) have two years of teaching experience; and (5) be currently employed as a principal, assistant principal, supervisor, or department head.

For conditional admission, applicants must also have a minimum undergraduate academic average of not less than 2.5 in the major area of study and meet requirements numbered 1, 3, 4, and 5, above for unconditional admission.

Persons not currently working in administrative or supervisory positions may be considered for the program by submitting a letter of recommendation from an administrative or personnel officer who can attest to the applicant’s teaching effectiveness and leadership potential. The letter should be addressed to the Dean of the School of Graduate Studies. All applicants must be interviewed by the Graduate Program Coordinator.

General Requirements
Eighteen (18) credit hours are required to complete the program. The practicum course, EDAD 798, Practicum in Educational Administration and Supervision, must be taken as the last course in the curriculum sequence. Any exceptions to this requirement must be approved by the Graduate Coordinator.

Program of Study
The certification program requires completion of the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASLC 601</td>
<td>Curriculum Theory &amp; Development</td>
<td>3</td>
</tr>
<tr>
<td>ASLJ 601</td>
<td>Legal Aspects of Education</td>
<td>3</td>
</tr>
<tr>
<td>ASLD 601</td>
<td>Group Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>EDAD 585</td>
<td>The Role of the Principal, Assistant Principal, &amp; the Instructional Supervisor in the Urban School</td>
<td>3</td>
</tr>
<tr>
<td>EDAD 798</td>
<td>Practicum in Educational Administration &amp; Supervision</td>
<td>3</td>
</tr>
<tr>
<td>EDSU 560</td>
<td>Supervision &amp; Evaluation of Curriculum &amp; Instruction</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours 18
Upon completion of the program, students will submit their credentials to the Maryland State Department of Education. Certification is awarded by the Maryland State Department of Education. A person who has completed the program and qualifies for certification as an Administrator I may be required to complete successfully the Maryland Assessment Center Program or a state approved equivalent assessment such as the Interstate School Leaders Licensure Assessment examination that is on the official list held by the Assistant State Superintendent of Certification and Accreditation within the last 5 years before initial appointment as a principal may be granted.
ELEMEENTARY & MIDDLE SCHOOL EDUCATION (M.S)

Iola Ragins Smith, Ph.D.
Chairperson, Department of Teacher Education & Professional Development
Jenkins Behavioral Science Building, Room 300
Tel: (443) 885-3292; Fax: (443) 885-8243
E-mail: ismith@jewel.morgan.edu

Objective
The Master of Science degree program in Elementary & Middle School Education is designed to enhance the competence of prospective and in service elementary and middle school teachers by providing a comprehensive training experience which emphasizes mastery of one or more sub-specialty areas of the elementary curriculum.

Admission
For **unconditional admission**, applicants must have also earned:
- A minimum undergraduate average of 3.0 in their major area of study and not less than 3.0 average overall.
- An undergraduate degree in elementary education.

For **conditional admission**, applicants must have also earned:
- A minimum undergraduate average of 2.5 in their major area of study.
- An undergraduate degree in elementary education or its equivalent.

General Requirements
Students are required to complete thirty-three (33) credit hours and pass a written comprehensive examination.

Program of Study

<table>
<thead>
<tr>
<th>Core Requirements (12 hours required)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>EDSR 504 Introduction to Educational Research</td>
<td>3</td>
</tr>
<tr>
<td>SFED 510 Historical, Philosophical &amp; Sociological Foundations of Urban Education</td>
<td>3</td>
</tr>
<tr>
<td>CUIN 522 The Elementary/Middle School Curriculum</td>
<td>3</td>
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<tr>
<td>EDPS 554</td>
<td>3</td>
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</tbody>
</table>

Credit Hours 12

<table>
<thead>
<tr>
<th>Sub-Specialty (21 hours required)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Science</td>
</tr>
<tr>
<td>EDSC 503 Science in the Elementary &amp; Middle School</td>
</tr>
<tr>
<td>EDSC 504 Seminar in Modern Elementary Science</td>
</tr>
<tr>
<td>EDSC 506 Physical Science as Inquiry</td>
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<tr>
<td>EDSC 510 Biological Science as Inquiry</td>
</tr>
<tr>
<td>EDCU 515 Utilization of Computers in Teaching</td>
</tr>
<tr>
<td>Elective</td>
</tr>
<tr>
<td>EDUC 788 or 789 Supervised Research or</td>
</tr>
<tr>
<td>EDUC 799 Thesis Seminar</td>
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</table>

Total Credit Hours 21

<table>
<thead>
<tr>
<th>B. Mathematics</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDMA 516 Seminar in Elementary/Middle School Mathematics Instruction</td>
</tr>
<tr>
<td>EDMA 581 Mathematical Principles &amp; Concepts for Elementary &amp; Middle School Teachers I</td>
</tr>
<tr>
<td>EDMA 582 Mathematical Principles &amp; Concepts for Elementary &amp; Middle School Teachers II</td>
</tr>
<tr>
<td>Course Code</td>
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<tr>
<td>EDMA 583</td>
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<tr>
<td>EDUC 515</td>
</tr>
<tr>
<td>Elective</td>
</tr>
<tr>
<td>EDUC 788 or 789</td>
</tr>
<tr>
<td>EDUC 799</td>
</tr>
</tbody>
</table>

**Total Credit Hours**: 21
MASTER OF ARTS - TEACHING (M.A.T.)

Marlene Greer-Chase, Ph.D.
Graduate Coordinator, M.A.T. Program
Jenkins Behavioral Science Building, Room 327
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E-mail: mgchase@moac.morgan.edu

Objective
The Master of Arts in Teaching (M.A.T.) degree program is designed for individuals who have a bachelor's degree in selected academic disciplines and who desire professional preparation for teaching at the middle school and high school levels.

Additional Criteria For Admission
Applicants seeking admission to the M.A.T. degree program must have:
- Earned a bachelor's degree in one of the following academic disciplines: Art, Biology, Chemistry, English, History, Mathematics, Music, or Physics.
- Submit a Miller Analogies or GRE Test score.

Program of Study
The M.A.T. program requires the completion of 43 graduate credits, including a full semester of supervised teaching, to qualify for the master's degree. Students are required to complete a masters comprehensive examination. Candidates shall become eligible to sit for the comprehensives upon successful completion of 27 hours of coursework. Additionally, students must have removed any "I" or "F" grades.

Note: All M.A.T. students registering for EDUC 524 and/or EDUC 525 must have, prior to registering for the aforementioned courses, successfully passed the Praxis I: Academic Skills Assessment Tests (i.e. achieve the minimum score required by the State of Maryland for the State Teaching License).

Graduation Requirements
To be eligible for graduation, students must:
- Complete all course requirements.
- Sit for and pass the comprehensive examination.
- Complete (i.e., achieve the minimum score required by the State of Maryland for the Teaching License) the appropriate Praxis II tests, including the Specialty Area test. The aforementioned scores must be submitted to the Department Chairperson and/or the Program Coordinator on/or before December 1 for students completing the program during the Fall semester, and on/or before May 1 for students completing the program during the Spring semester.

Professional Education Content Courses

<table>
<thead>
<tr>
<th>CREDIT HOURS</th>
<th>Course Description</th>
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<tbody>
<tr>
<td>EDSR 504</td>
<td>Introduction to Educational Research</td>
</tr>
<tr>
<td>REED 520</td>
<td>Teaching Reading in the Content Areas, II</td>
</tr>
<tr>
<td>EDSR 517</td>
<td>Action Research in the Classroom</td>
</tr>
<tr>
<td>EDUC 500</td>
<td>Introduction to Teaching</td>
</tr>
<tr>
<td>EDUC 501</td>
<td>Cognitive Basis for Instruction</td>
</tr>
<tr>
<td>EDUC 515</td>
<td>Utilization of Computers in Teaching</td>
</tr>
<tr>
<td>EDUC 519</td>
<td>Socio-cultural Context of Schooling</td>
</tr>
<tr>
<td>SPED 582</td>
<td>The Exceptional Child: Administrative &amp; Program Needs</td>
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<tr>
<th>PRACTICUM</th>
<th>Course Description</th>
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<tr>
<td>EDUC 524</td>
<td>Student Teaching (Internship)</td>
<td>12</td>
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<tr>
<td>EDUC 525</td>
<td>Professional Development Seminar</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
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<td>43</td>
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</table>
SCHOOL OF EDUCATION & URBAN STUDIES

COURSE DESCRIPTIONS

Departmental Courses: Advanced Studies, Leadership and Policy

ALSC 601 Curriculum Theory and Development
Three Hours: 3 Credits
This course presents social, psychological and political foundations of the curriculum; it examines curriculum issues, theories, trends, and the practices followed in planning and developing the curriculum. Recent developments in curriculum such as the Afro-centric curriculum, bilingual education, and various approaches to multicultural education are examined.

ASLC 602 Curriculum, Instruction and Assessment in Higher Education
Three Hours: 3 Credits
This course, specially intended for those who plan to be curriculum developers and academic affairs specialists in higher education, will devote significant attention to academic and curricular planning, selecting and utilizing instructional strategies. It will also provide an overview of the assessment of student learning outcomes in higher education. Students will be required to develop either a proposal for a new curriculum or the critique of an existing curriculum in a higher education institution.

ASLD 601 Group Dynamics
Three Hours: 3 Credits
This course presents methods of organizing and operating groups to deal with the management of educational change. The course presents techniques of effective communication, group interaction and planning, and implementation for solving educational problems in large and small groups. Students will develop skills and apply them to problems in an educational setting.

ASLF 601 Educational Economics and Finance
Three Hours: 3 Credits
This course, providing a theoretical base for the use of funds for education, addresses topics such as tuition and fees, state methods of financing, financial planning, cost benefit analysis, school and university budgeting procedures, the federal role, and capital outlay.

ASLJ 601 Legal Aspects of Education
Three Hours: 3 Credits
This course involves the analysis of legal issues related to education and includes an examination of major court decisions. It covers the legal structure of education, as well as topics related to religion, academic freedom, employment law, due process, free speech and freedom of expression, search and seizure, desegregation, tort liability, and intellectual property/copyright, among others. The case method is used primarily, with considerable reliance on the Internet.

ASLL Learning Theory
Three Hours: 3 Credits
This course introduces participants to the fundamentals of human cognition and learning. It encourages participants to explore the implications of theories of learning for the enhancement of classroom teaching and learning.

ASLP 601 Politics of Education
Three Hours: 3 Credits
This course, through a case study and web-based approach, enhances the student’s understanding of the role of politics in colleges and universities. It addresses the issues of pressure groups, political tactics and strategies in academic and administrative decision-making, the relationship of governing boards to other higher education constituencies, and the general political terrain that affects the planning, administration and development of higher education.
ASLS 601  Contemporary Issues in Urban Education
Three Hours: 3 Credits
This course presents an overview of major social policy issues in contemporary urban education. Emphasis is placed on such topics as educational standards, diversity, access, student success, technology, learning centered colleges, institutional effectiveness, and governance and administration. Special emphasis is placed on some perennial issues as they relate to urban community colleges.

ASLS 660  Urban Systems Analysis
Three Hours: 3 Credits
Emphasis is placed on the interactive effect between systems. Various types of systems and their impact on the urban environment will be assessed.

EDSR 504  Introduction to Educational Research
Three Hours: 3 Credits
This course is designed to introduce students to various methods and techniques of educational research; provides intensive experience in reading analyzing and interpreting educational research, and experience in writing abstracts, reports on research, and seminar papers.

EDSR 517  Action Research in the Classroom
Three Hours: 3 Credits
This course, an action research practicum, will provide an understanding of the research process in the context of urban/suburban classrooms. Research understandings and skills acquired at an introductory level are developed to application levels. Topics studied will include research methodologies, statistics and computer applications. Prerequisite: EDSR 504

EDSR 550  Educational Statistics
Three Hours: 3 Credits
This course is a study of descriptive statistics. It will emphasize the organizing and graphing of data, the normal distribution, indices used in describing distributions, correlation and linear regression, and probability.

EDSR 580  Measurement and Evaluation
Three Hours: 3 Credits
Nature and types of educational measures, in the selection and use of such tests are emphasized. Concepts of validity, reliability, and norms, their uses and limitations will be explored. Critiquing and selecting appropriate measuring devices. Constructing measuring devices. Social controversies about the selection and use of such tests are emphasized. The course will involve lecture, group work, case studies, and Internet research.

EDSR 604  Introduction to Educational Research
Three Hours: 3 Credits
This course is designed to introduce students to various methods and techniques of educational research; provides intensive experience in reading analyzing and interpreting educational research, and experience in writing abstracts, reports on research, and seminar papers.

EDSR 620  Action Research in Urban Education
Three Hours: 3 Credits
This course combines a study of research methodology applied to the urban setting with a field experience. The urban leader will be required to demonstrate his/her ability to reflect upon and to evaluate critically the research methodologies he/she has mastered by designing, conducting, analyzing, presenting and defending an educational or community based project. A research project is required for this course.
EDSR 622  Quantitative Research Methods in Education  
Three Hours: 3 Credits  
This course aims to build competence in the design of quantitative research studies in education. Participants will become familiar with the major types of quantitative designs and will study the fit between research questions, research design and statistical analyses. Evaluation is based on the development of a quantitative research proposal. EDSR 631 is a prerequisite.

EDSR 628  Applied Social Research  
Three Hours: 3 Credits  
Focuses on skills necessary for social research in general and survey research in particular. These include, but are not limited to, conceptual design of a research project, constructing operational definitions, sampling logic, instrument design and development, collection and coding of data, computer aided analysis of the data, and writing the research report.

EDSR 630  Educational Statistics I (Descriptive)  
Three Hours: 3 Credits  
A study of descriptive techniques for the analysis of educational data. Students will be introduced to the use of computer application packages such as SPSS in performing such analyses.

EDSR 631  Educational Statistics II (Inferential)  
Three Hours: 3 Credits  
This course focuses on the use of inferential techniques for the testing of hypotheses in educational research. At the end of the course students should have acquired the competence to conduct statistical analyses in their own research and to be more critical consumers of published research.

EDSR 719:  Quantitative Data Analysis in Education  
Three Hours: 3 Credits  
Continued treatment of statistical estimation, testing, and research synthesis. Inferential techniques including ANOVA and multiple regression with computers. Course will involve both lecture and laboratory. Prerequisite: Basic competencies in statistical analysis.

EDSR 739  Management and Analysis of Large Data Sets  
Three Hours: 3 Credits  
Use of statistical packages for data analysis. Emphases on data management, date structures, and related statistical procedures. Course will involve both lecture and laboratory. Prerequisite: Demonstrated competency in statistical analysis at the advanced level.

EDSR 818  Advanced Qualitative Research Methods in Education  
Three Hours: 3 Credits  
Focuses on the underlying philosophy and epistemology of qualitative approaches, types of approaches (i.e., phenomenology, grounded theory, ethnography), specific data collection methods (interviewing, text analysis, observation), and issues of rigor. Prerequisite: Demonstrated competency in basic qualitative approaches.

EDSR 829  Advanced Qualitative Research: Field Research  
Three Hours: 3 Credits  
This primarily experiential course will focus on how to conduct fieldwork and to write reports on qualitative research. Central topics include framing a study, collecting data, considering ethical and political issues, analyzing and interpreting data, and writing for particular purposes. Students are expected to conduct one of the following types of qualitative studies: a micro-ethnography, a life history, a case study, or an action research project.

EDSR 889  Research Practicum in Higher Education  
1-3 Credits  
Before being admitted to candidacy and undertaking their dissertation projects, students must demonstrate their ability to design and conduct research. Generally this will involve participation in a published or refereed article that is presented at professional
conferences such as AAHE, AERA, ASHE, AIR, and the like. The Practicum may also be a cooperative or collaborative research project conducted either with a member of the faculty or with a student or faculty member(s) from another institution. The Research Practicum (i.e., Field Research Project) provides an opportunity to directly experience the research process prior to the dissertation and a chance to gain entrance to professional networks that are important to the students' career advancement. Alternatively, students can submit single authored higher education-related research that they completed prior to admission for faculty review and a waiver of the Research Practicum (Field Research Project) may be given based on this review of types of qualitative study: a micro ethnography, a life history, a case study, or an action research project.

PROGRAM-SPECIFIC COURSES

ADED 531 Instructional Strategies in Adult Education
Three Hours: 3 Credits
This course treats approaches to learning that have proved effective for adults. It will include the examination and construction of instructional materials for use in adult education programs and will give attention to standardized evaluative instruments used for adult placement.

ADED 532 Administration and Program Planning in Adult Education
Three Hours: 3 Credits.
Considering the principles of administration for adult education programs, the emphasis is placed on leadership styles, organizational structures, and management procedures.

ADED 533 Counseling Adults
Three Hours: 3 Credits
This course is a treatment of problems commonly encountered in dealing with adult learners and of techniques for their solution. Basic counseling and guidance processes employed in adult education are studied.

ADED 595 Seminar in Adult Basic Education for Urban Teachers
Three Hours: 3 Credits
The primary concern of this course is the development of relevant perceptions for educating urban adult students. Teachers will be provided the opportunity to become aware of the typical daily experiences of an inner-city adult through field trips, walking tours, and visits to homes and Adult Basic Education centers. Attempts will be made to discover new ways of educating the inner-city adult to manipulate his/her experiences advantageously. These perceptions and experiences will be utilized in the development of educational programs for the illiterate and semi-illiterate adult.

CUIN 522 The Elementary/Middle School Curriculum
Three Hours: 3 Credits
This course examines the content and organization of curriculum experiences appropriate to meeting the needs of urban elementary school children in a multicultural environment. Attention is given to reviewing and evaluating forces which shape the elementary/middle school curriculum and reflective approaches to generalizing principles of curriculum development.

CUIN 563 Modern Curriculum Strategies in Content Areas
Three Hours: 3 Credits
This course provides an opportunity to examine effective processes of curriculum design and implementation with selective study and analysis of recent curriculum trends and materials; discussion and evaluation of research. Major issues and problems relating to teaching of English, mathematics, reading, science or social studies will be discussed.

CUIN 567 Seminar in Interdisciplinary Math and Science Curriculum
Three Hours: 3 Credits
This interdisciplinary workshop for teachers is designed to develop and enhance curricula strategies and instructional methodologies in mathematics and science courses.
CUIN 568  Effective Classroom Instructional Techniques for the Urban Teacher
Three Hours: 3 Credits
The course seeks to enhance the skills necessary to provide appropriate instructions in an urban school. Specifically, opportunities will be provided to learn both instructional strategies and classroom management strategies.

CUIN 577  Co-Curriculum Program
Three Hours: 3 Credits
This course is designed to help teachers and administrators in the organization of those areas of supervision not directly concerned with the curriculum. Such areas as athletic programs, in-service training, school plant utilization, personnel problems and student problems will be emphasized.

CUIN 581  Techniques in Programmed Instruction
Three Hours: 3 Credits
This course is an analysis of programmed instruction techniques such as selection, utilization and evaluation of existing programs and teaching machines. The student will be required to develop learning objectives while writing and validating programs.

CUIN 590  Designing Systematic Approaches to Teaching and Media
Three Hours: 3 Credits
This course is intended to offer the teacher or school administrator an overview of modern trends and to analyze in detail several new elements and approaches which have contributed to creative teaching. The course content is a blend of the science of learning and the art of teaching. Special focus will be centered on the learner, definition of behavioral objectives, instructional designs, selection of media, and the teacher as the manager of the learning process.

CUIN 596  Practicum in Instructional Methodology
Three Hours: 3 Credits
This course provides an opportunity to apply learning principles and instructional techniques and to use educational materials in the planning and implementation of broad educational activities. Laboratory experiences complement the theory.

EDAD 555  Introduction to Urban Educational Administration and Supervision
Three Hours: 3 Credits
This course presents a comprehensive analysis of the structure, governance and management of public schools in the U.S. with emphasis on problems facing urban school administration and supervision. Organizational, social, and behavioral theories explaining phenomena of leadership, decision-making and communication processes are introduced. Basic aspects of fiscal and business management of schools are presented with opportunities for simulated practice.

EDAD 558  School and Community Relations and Political Influences in Urban Schools
Three Hours: 3 Credits
This course constitutes a study of the principles, philosophies, techniques, agencies, and practices involved in a desirable school and community relations program. Special attention is given to the role of the school administrator and the instructional supervisor in coordinating school-community experiences in urban schools.

EDAD 585  The Role of Administrators in Urban Schools
Three Hours: 3 Credits
This course extends the theories and skills first developed in an introduction to urban educational administration and supervision by examining the practical, day-to-day aspects of school administration with emphasis on specific techniques used by the principal, assistant principal, and the instructional supervisor in leadership, staff development, supervising instruction, and managing resources. Prerequisite: EDAD 555.

EDAD 601  Theories and Practice of Urban Educational Leadership
Three Hours: 3 Credits
This course provides an opportunity to explore the nature and theories of leadership, both classical and contemporary. Various types of urban community college leaders will be identified and discussed in terms of their style and effectiveness. Problems of urban leaders will be explored as well as their functions and duties. Readings designed to enhance the subject-matter competency of urban leaders will be required.
EDAD 602  Educational Planning and Management  
Three Hours: 3 Credits  
An in-depth study of educational planning and management practices in community colleges will be examined in this course. Students will engage in activities to increase their understanding of planning and management processes. Detailed analysis of selected community college case studies will be required and students will be expected to develop a strategic plan.

EDAD 603  Clinical Studies/Internship: Administration and Social Policy  
Six Hours: 3-6 Credits  
This course is a supervised internship designed to provide students with the opportunity to participate in a setting where social policy is actually developed and administered. Students will be required to initiate and implement relevant social policy in the specific organizational setting.

EDAD 605  Clinical Studies/Internship: Educational Planning  
Six Hours: 3-6 Credits  
This course is a field experience for the student. It is designed to provide an opportunity to put into practice leadership skills developed in prior courses. The internship is tailored to meet the background and interests of the individual student. The student and Graduate Program Coordinator must mutually agree on placement. Students will be required to initiate and complete a research project as a part of completing the requirements of this course. This course should be taken after completing the second year of study.

EDAD 607  Administration of Public Educational Organizations  
Three Hours: 3 Credits  
This course examines the interaction of both external and internal resource constraints upon the administrative decision processes in organizational settings with particular emphasis on educational institutions.

EDAD 620  Seminar in Educational Planning  
Three Hours: 3 Credits  
This course is designed to provide an in-depth treatment of educational planning processes. A wide range of planning issues and concerns will be discussed. Members of the planning seminar will jointly engage in a variety of activities designed to enhance their understanding of the planning process.

EDAD 630  Seminar in Administration and Social Policy  
Three Hours: 3 Credits  
This seminar course will explore current educational, political, social, and policy issues faced by the urban administrator. Seminar participants will engage in appropriately designed activities including case studies, research projects and policy analysis processes. (1 credit hour per semester).

EDAD 795  Research Seminar in Urban School Administration and Supervision  
Three Hours: 3 Credits  
This is an advanced seminar course taken at the end of the curriculum sequence. Students are required to identify and assess an urban educational problem, develop a change strategy to solve the problem, and evaluate the success of the project. Completion of Core and Concentration courses is required as prerequisites for this course.

EDAD 798  Practicum in Educational Administration and Supervision  
Three Hours: 3 Credits  
This course is a field experience in educational administration or supervision. It is intended to provide the student with an opportunity to put into practice concepts developed in prior courses. The practicum will be adjusted to fit the background and experience of the individual student. Assignments will be supervised by the course individual and will be arranged in cooperation with school systems in the State of Maryland. An extensive seminar is included which permits an opportunity for sharing experiences. This course should be taken at the conclusion of the program.
EDHE 600  The American Community College  
Three Hours: 3 Credits  
This course provides an in-depth study of the comprehensive community college. The emphasis of the course will be the historical development, mission, structure, functions, student demographics, and governance structures of community colleges. Special attention is paid to the uniqueness of urban community colleges.

EDHE 601  Leadership and Administration in Community Colleges  
Three Hours: 3 Credits  
This course provides an opportunity to explore the nature and theories of leadership, both classical and contemporary. Various types of urban community college leaders will be identified and discussed in terms of their style and effectiveness. Problems of urban leaders will be explored as well as their functions and duties. This course examines theories and principles of leadership and administration and applies them to concrete urban community college situations.

EDHE 602  Professional Development Seminar for Careers in Community Colleges-Year I  
Three Hours: 3 Credits  
This course provides an overview of the challenges and opportunities for leadership in contemporary community colleges. It examines the general and specific requirements for completing the program of study in community college leadership, identifying and developing a research topic, defining purposes and methods of research, outlining effective career advancement strategies and developing oral and written communication skills.

EDHE 605  Community College Planning and Management  
Three Hours: 3 Credits  
This course examines the theory and practice of strategic planning and management in the contemporary comprehensive community college. The course focuses on (1) the nature of the planning process, (2) the role of planning in shaping academic strategy in higher education, and (3) the components of the Integrated Planning Model. Critical questions addressed in this course include: What is a strategic plan? What is the process for creating a strategic plan? How is such a plan developed within a community college? Students working in cohort groups will develop a strategic plan for a prototype comprehensive community college.

EDHE 606  The Learning College  
Three Hours: 3 Credits  
An analysis of the Learning Centered Community College is the primary focus of this course. It focuses on the organizational culture, pedagogical practices, institutional priorities, curriculum content, design, delivery, student development programs and services, and use of technology in learning centered colleges. Special emphasis is placed on how the Learning Revolution has shifted the concerns of community colleges from teaching to learning in their efforts to enhance the quality of its programs and services. The course also examines the role of major educational leaders who have had an influence on the development of the Learning Revolution.

EDHE 607  Student Development in Community Colleges  
Three Hours: 3 Credits  
The function of this course is to combine theory with issues facing student development professionals in community colleges. This is accomplished by examining the historical origins and scope of student services and its various components. Special emphasis is placed on understanding the contemporary diverse student populations and their expectations. Other areas of study include an exploration of how technology, learning revolution, financial resources, special interests and other societal changes have transformed student development in community colleges.

EDHE 608  Technology in Contemporary Community Colleges  
Three Hours: 3 Credits  
The primary emphasis of this course is to examine how technology influences current teaching and learning processes in the contemporary community college. Important aspects of this course are the influence of technology on communication between faculty and students, design and modification of curriculum to meet diverse needs and interests of students, access to sources of infor-
EDHE 609 Contemporary Issues in Community Colleges
Three Hours: 3 Credits
This course presents an overview of major social policy issues in contemporary urban education. Emphasis is placed on such topics as educational standards, diversity, access, student success, technology, learning centered colleges, institutional effectiveness, and governance and administration. Special emphasis is placed on some perennial issues as they relate to urban community colleges.

EDHE 611 Professional Development for Careers in Community Colleges-Year 2
Three Hours: 3 Credits
This course is designed to help doctoral students become better professionals. Students are provided assistance with identifying and developing their talents and leadership skills. Students are encouraged to take a critical look at their strengths and weaknesses and to develop action plans to facilitate their professional growth and development.

EDHE 612 Writing Publishing & Presenting
One Hour: 1 Credit
This course is designed to increase the student's ability to write for publication and to present at meetings and conferences.

EDHE 613 Public Policy Analysis
One Hour: 1 Credit
This course introduces public policy analysis as a skill and tool for community college leaders. The course examines how community college leaders must understand public policy and its impact on community colleges. The course examines major roles of public policy in education.

EDHE 615 The Community College Presidency
Three Hours: 3 Credits
This course utilizes the theories and skills advanced in the leadership and administration course to examine the role of the community college president. The major focus of this course is an in-depth study of the practical, day-to-day functions of the president. Other important topics are formulating a vision of the institution's future, building consensus, taking risks, building and maintaining relationships with faculty and other internal and external constituencies, managing relationships with trustees and governing boards, exercising and delegating authority and other related functions.

EDHE 616 Community College Trustees and Governing Boards
Three Hours: 3 Credits
This course provides an opportunity for students to learn more about the role of community college trustees-who they are as individuals and as a group and to learn about their perceptions of community college governance. It also examines forms of governance, with a critical review of "Policy Governance", board/CEO roles, leadership issues, relationship of boards to the community, and board efficiency and productivity.

EDHE 617 Clinical Internship-The Community College Experience
Three Hours: 3 Credits
The internship experience provides an opportunity for the Intern to link theory to practice. The Intern should be engaged in a specific focus such as the analysis of problems and/or organizational issue or special project within the selected college.

EDHE 622 Issues in General Education
Three Hours: 3 Credits
This course examines the role of General Education in community college curricula, including the relationship among career programs, transfer preparation and general education. Students will examine the philosophical, political, and logistical issues from both historical and contemporary perspectives.
EDHE 623 Workforce Development and Community/Industry Partnerships: Issues for Teaching
Three Hours: 3 Credits
This course investigates the background, development, function and goals of workforce development at the community college, as well as explores the implications of community and industry partnerships with community colleges. The course will emphasize practical applications of workforce related concepts and research in administration and instruction at the community college.

EDHE 625 Discipline Foundation
Three Hours: 3 Credits
This course is designed to examine the history, broad concepts, and the theoretical foundation of a selected discipline. Students will gain a comprehensive understanding of major theories and paradigms related to the area of concentration. The foundation component allows for individually designed approaches and will prepare students to move from the theoretical to the practical in selected disciplines.

EDHE 626 Seminar in the Scholarship of Teaching
Three Hours: 3 Credits
This course examines (1) current issues of teaching and learning in higher education, with special emphasis on community colleges, and (2) the literature of the scholarship of teaching. The course will also seek to develop practical competence in the analysis of teaching skills, the development of the teaching portfolio, and the conduct of the classroom-based research.

EDHE 627 Mixed Methods Research for Community College Leaders
Three Hours: 3 Credits
The purpose of this course is to introduce the basic concepts, procedures, practices, and techniques associated with the mixed methods approach to educational research. Students will examine the nature and purpose(s) of mixed methods research, as well as fundamental research designs, strategies, data collection, validation, and analysis.

EDHE 628 Assessing Student Learning
Three Hours: 3 Credits
This course provides an overview of tools that can be used to evaluate and grade student learning in a course or academic program, including tests, assignments, reflective writing, classroom assessment techniques, portfolios, and published instruments. Students develop a portfolio of tools that can be used in courses they teach, as well as how to evaluate the validity and reliability of assessment tools.

EDHE 630 Contemporary Instructional Theories and Practices for Community College Educators – Research Seminar (I)
Three Hours: 3 Credits
This course provides an in-depth understanding and analysis of instructional theories, practices and research in selected academic disciplines. Following discipline-specific related lines of inquiry, students will examine research taken from theoretical and practical perspectives that shape the disciplines.

EDHE 631 Contemporary Instructional Theories and Practices for Community College Educators – Research Seminar (II)
Three Hours: 3 Credits
This course expands and advances the examination of research and practice in a specific community college academic discipline. Students will conduct inquiry into topics related to research and practices and will develop a preliminary instructional practicum plan for implementation.

EDHE 997 Dissertation Guidance
Three Hours: 3 Credits

EDHE 998 Dissertation Seminar
Six Hours: 6 Credits
EDMA 516  Seminar in Elementary/Middle School Mathematics Instruction  
Three Hours: 3 Credits  
This course will emphasize instructional techniques involving effective communication, intuitive learning, critical thinking and reflection in applying methodology of modern mathematics to grades K-8. These instructional techniques will be suitable for a technologically developed urban, multicultural environment. Research studies and their implication for teaching will also be considered.

EDMA 530  Teaching For Concept Development In Mathematics  
Three Hours: 3 Credits  
This course will enhance teachers' pedagogical knowledge through a critical examination of the methods and materials used in teaching K-12 mathematics.

EDMA 554  Mathematical Investigations in the High School Curriculum I  
Three Hours: 3 Credits  
This course is designed to deepen high school teachers' mathematical content knowledge of the algebra and pre-calculus taught within high schools. Through integrated curricula, numerous connections will be made among mathematical topics and to topics outside of mathematics, particularly science.

EDMA 555  Mathematical Investigations in the High School Curriculum II  
Three Hours: 3 Credits  
This course seeks to develop in high school mathematics teachers, deeper mathematical content knowledge of the geometry, probability, and statistics taught within high schools. Through integrated curricula, numerous connections will be made among mathematical topics and to topics outside of mathematics, particularly science.

EDMA 581  Mathematical Principles and Concepts for Elementary/Middle School Teachers I  
Three Hours: 3 Credits  
This course will provide teachers of grades K-8 with a foundation in the algebra of the real number system. Topics include: subsets of the real numbers and binary operations on them, rules of logical inference, polynomials, solution of linear and quadratic equations and inequalities, the function concept and the graphical representation of functions, combinations and permutations of finite sets, the principle of mathematical induction. (Credits for this course are not applicable toward a degree in mathematics.)

EDMA 582  Mathematical Principles and Concepts for Elementary/Middle School Teachers II  
Three Hours: 3 Credits  
This course consists of the concepts of plane and solid geometry needed to support the mathematics curriculum requirement in geometry for teachers of K-8. Topics to be covered include: plane Euclidean geometry, volumes of regular polyhedral and spheres, non-Euclidean metrics, angles and an introduction to right-angle trigonometry. (Credits for this course are not applicable toward a degree in mathematics.)

EDMA 583  Applied Mathematics for Elementary/Middle School Teachers  
Three Hours: 3 Credits  
This course develops a wide variety of applications intended to supplement and enhance use of the concepts and techniques covered in EDMA.581 and 582. Applications will be selected to show algebra and geometry in alternative as well as complementary roles as problem solving tools. (Credits for this course are not applicable toward a degree in mathematics.)

EDMA 620  History, Philosophy and Sociology of Mathematics  
Three Hours: 3 Credits  
This course examines the ways in which the teaching and learning of mathematics are influenced by the history, philosophy and sociology of the discipline. It explores the ways in which cultural forces have shaped mathematics and continue to influence its teaching.
EDMA 621 Planning Developing and Evaluating the Mathematics Curriculum
Three Hours: 3 Credits
This course aims to develop skill in all aspects of curriculum development in K — 16 mathematics. Designing the needs assessment, translating needs into curriculum materials, supporting the implementation and selecting appropriate evaluation strategies are some of the skills addressed in this course.

EDMA 630 Methods of Concept Development in Mathematics Education
Three Hours: 3 Credits
The course seeks to develop competence in the teaching of mathematics at all levels. It draws on learning theory and applies ideas about how learners acquire concepts to the teaching of mathematics. Students in this course apply theoretical principles to the design and evaluation of lessons that facilitate concept acquisition in mathematics.

EDMA 641 Practicum in Mathematics Education
Three Hours: 3 Credits
This course requires the design development and implementation of an intervention into some aspect of mathematics education at the level of the student's specification. Students will be supervised at all stages of the intervention and will have opportunity to share experiences with peers in a seminar setting.

EDMA 650 Professional Development and Practice of Mathematics Teachers
Three Hours: 3 Credits
This seminar course will examine the broad range of concerns and issues addressed in other courses in terms of how professional development of teachers can best be addressed. The research literature on teacher cognition and practice will be used as a basis for developing effective approaches to professional development in mathematics education. Prerequisite: EDSM 610, EDSM 620, EDSM 621, EDSM 630, EDUC 640, CUIN 562, or with permission from instructor.

EDMA 651 Seminar: Current Topics and Trends in Mathematics Education
Three Hours: 3 Credits
This seminar course will cover a variety of current and cutting edge topics in mathematics education practice, research and theorizing that may not be addressed in other courses. Guest presentations by researchers and mathematics education practitioners as well as student presentations will be the mode of delivery.

EDMA 660 Special Topics in Mathematics Education
Three Hours: 3 Credits
This course provides opportunity for individual exploration of any issue related to mathematics education. Participants are encouraged to identify an issue that is of particular relevance to their areas of specialization and will be required to undertake an extensive exploration of the literature relevant to that issue. A literature review that gives evidence of control of ideas and the ability to reflect critically on the implications of these ideas is the mode of assessment for the course.

EDSC 503 Science in the Elementary and Middle School
Three Hours: 3 Credits
This is a subject-matter centered course which includes: (1) orientation to the major themes connected with science in the elementary and middle school; (2) work with science materials in a laboratory center; (3) lectures, demonstrations, and class discussions; and (4) interpretation of recent developments in science at the K-8 level and their application to the multicultural urban classroom. (Not applicable to a degree in science).

EDSC 504 Seminar in Modern Elementary Science
Three Hours: 3 Credits
This course will emphasize techniques for organizing, teaching, and evaluating local environmental education programs (grades K-4 and 5-8) that are in consonance with the humanistic, interdisciplinary approaches recommended by the Maryland State Board of Education. An attempt will be made to provide a philosophical educational background to facilitate reflective insights as
to the social, economic and political implications of science as well as the impact of science upon society. (Not applicable to a degree in science).

EDSC 506  Physical Science Inquiry  
Three Hours: 3 Credits  
This course is designed to give the teacher an opportunity to develop those competencies essential to successful teaching of the concepts of the physical and earth sciences in grades pre-K-8. The inquiry mode of instruction will be emphasized in learning experiences which will include field and laboratory inquiry tasks related to ideas of the universe, matter and energy, and the earth and its atmosphere. Explorations of the inquiry mode will be made with specific attention being given to historical background, the various methods of inquiry, the underlying assumptions, the major purposes, the role of the teacher as leader, communicator, and facilitator, and the role of the learner. (Not applicable to a degree in science).

EDSC 510  Biological Science as Inquiry  
Three Hours: 3 Credits  
This course is designed to provide the student with the opportunity to develop those competencies essential to successful teaching of concepts of the life sciences in grades pre-K to 8. Field and laboratory experiences will utilize inquiry tasks involving living things, their maintenance and interactions, and the unique role of man in the delicate balance of the ecosystem. Emphasis will be placed on the interdependence of the various disciplines of science to encourage an in-depth understanding of the nature of science and the nature and meaning of inquiry. Prerequisite: SCIE 506 (Not applicable toward a degree in science).

EDSC 530  Teaching for Concept Development in Science  
Three Hours: 3 Credits  
This course will enhance student pedagogical knowledge through a critical examination of the methods and materials used in teaching K-12 science.

EDSC 553  Science in the Secondary School Curriculum  
Three Hours: 3 Credits  
This course will focus on the objectives, curricula, methods, strategies and materials, evaluations and teacher preparation relative to the teaching of science in the secondary schools in the United States. This course will provide a historical perspective, assess and interpret current practices and trends, and anticipate future emphasis in secondary school science programs in this country.

EDSC 554  Science in the High School Curriculum I: Matter and Energy  
Three Hours: 3 Credits  
This course combines science content and pedagogy and is designed for the preparation of high school mathematics and science teachers. By its emphasis on matter and energy, which are overarching, interdisciplinary concepts of science, and its treatment of the factors that promote children’s conceptual development in science, the course reflects the most current thinking on science teacher preparation.

EDSC 555  Science in the High School Curriculum II: Explaining and Predicting Change  
Three Hours: 3 Credits  
This course combines science content and pedagogy for the preparation of high school science teachers for effective delivery of high school science curricula. The course will engage students with important pedagogical issues and will enhance students’ understanding of important interdisciplinary science concepts.

EDSC 621  Planning, Developing and Evaluating the Science Curriculum  
Three Hours: 3 Credits  
This course aims to develop skill in all aspects of curriculum development in K-12 mathematics. Designing the needs assessment, translating needs into curriculum materials, supporting the implementation and selecting appropriate evaluation strategies are some of the skills addressed in this course.

EDSC 630  Methods of Concept Development in Science Education
Three Hours: 3 Credits
This course aims to provide the theoretical bases as well as the skills involved in designing, developing, delivering and evaluating lessons in science education K-I 6. The course draws heavily on the conceptual change in literature and examines the implications of learners’ alternative frameworks for the teaching and learning of science.

EDSC 641 Practicum in Science Education
Three Hours: 3 Credits
This course requires the design development and implementation of an intervention into some aspect of science education at the level of the student’s specification. Students will be supervised at all stages of the intervention and will have opportunity to share experiences with peers in a seminar setting.

EDSC 650 Professional Development and Practice of Science Teachers
Three Hours: 3 Credits
This course examines the broad range of issues addressed in other science education courses with a view towards an integration of these issues into a framework for the professional development of science teachers. The research literature on teacher cognition and practice will be used as a basis for the design of effective approaches to the professional development of science teachers. The course engages students in case analyses and in the clinical supervision of classroom teachers. Prerequisites: CUIN 562, EDSC 630, or with permission of instructor.

EDSC 651 Seminar: Current Topics and Trends in Science Education
Three Hours: 3 Credits
This seminar course will cover a variety of current and cutting edge topics in science education practice, research and theorizing that may not be addressed in other courses. Guest presentations by researchers and science education practitioners as well as student presentations will be the mode of delivery.

EDSC 660 Special Topics in Science Education
Three Hours: 3 Credits
This course provides opportunity for individual exploration of any issue related to science education. Participants are encouraged to identify an issue that is of particular relevance to their areas of specialization and will be required to undertake an extensive exploration of the literature relevant to that issue. A literature review that gives evidence of control of ideas and the ability to reflect critically on the implications of these ideas is the mode of assessment for the course.

EDSM 500 Masters Project in Mathematics and Science Education
Three Hours: 3 Credits
This course fulfills the requirement for the Project option of the Master of Science in Mathematics Education or the Master of Science in Science Education. Students who select this option are required to undertake a classroom-based curriculum project in mathematics or science under the supervision of an advisor. The project involves the design, development, implementation and recording of curriculum materials in mathematics or science.

EDSM 530 Assessment of Learning in Mathematics and Science
Three Hours: 3 Credits
This course explores the basic concepts related to the assessment of student learning in mathematics and science. It encourages teachers to think broadly about the purposes of assessment and to view assessment as an integral part of the instructional process. The principal focus of the course is to help participants to develop the competence to design and use a range of traditional and alternative assessment strategies.

EDSM 610 Student Learning, Thinking and Discourse in Mathematics and Science Education
Three Hours: 3 Credits
This course is designed as a seminar that will examine recent theory and research in student learning, thinking and discourse. Students will be required to read extensively in the areas of constructivism, schema theory, conceptual change, problem-solving and control strategies as a basis for understanding the teaching and learning environment in mathematics and science classrooms.
EDSM 611  Science, Technology, and Society  
Three Hours: 3 Credits  
Science, Technology, and Society (STS) are an approach to the teaching of science that emphasizes the teaching of science concepts in the contexts of technology and society. This seminar course will examine the extensive literature on the relationship among science, technology, and society, and how this area of thinking has been affecting efforts to revise curriculum development and practices in science education. Prerequisite: EDSM 620

EDSM 620  History, Philosophy, and Sociology of Science  
Three Hours: 3 Credits  
Traditional science curricula have largely ignored any explicit attention to the history, philosophy and sociology of science. However current trends in both the research and practice of science education have placed increased emphasis on the implications of these for understanding the nature of science. This course will identify key issues in the history, philosophy and sociology of science and will provide students with a basis for critical analysis of science education curricula.

EDSM 621  Communities of Inquiry: Issues in Curriculum and Instruction  
Three Hours: 3 Credits  
The notion of classrooms as communities of inquirers is an important strand of research and theorizing in education. This seminar course critically examines the research literature in this field. Cooperative groups, classroom discourse analysis and social constructivism are explored as bases for the creation of learning communities in science and mathematics classrooms. Prerequisites: EDSM 610, or with permission of instructor.

EDSM 630  Assessment and Evaluation in Science and Mathematics Education  
Three Hours: 3 Credits  
This seminar course will examine a variety of approaches for assessing and evaluating student learning, thinking, and discourse in the science and mathematics classroom. Special emphasis is placed on critically evaluating the assumptions underlying each approach to classroom assessment. In addition to traditional assessment strategies, the course seeks to develop competence in the use of alternative strategies such as journals, portfolios, classroom observation and discourse analysis. Prerequisites: EDPS 554, or with permission of instructor. Recommended prior course: EDSR 621.

EDSM 631  Issues and Applications of Technology in Science and Math Education  
Three Hours: 3 Credits  
This course will critically examine the issues and assumptions driving our society towards increased use of technology as well as the effects of such use of technology on individuals and groups. After examining these issues, students will examine effective uses of technology in the classroom. Student projects will involve the development of technological applications for instructional purposes.

EDSM 632  Instructional Systems Analysis for Mathematics and Science Education  
Three Hours: 3 Credits  
In this course students are encouraged to go beyond the development of technical skill in using educational technologies to reflect deeply on how these technologies can be integrated into instructional systems that qualitatively change the way that teaching and learning occurs in schools. Students combine their knowledge of learning theories with a knowledge of educational technologies in the design of effective learning experiences in mathematics and science.

EDSR 520  Computer Programming for School Personnel  
Three Hours: 3 Credits  
This course is designed to give the teacher or administrator an overview of the applications requiring the integration of data processing and analytical programming techniques. Programming tools include familiarity with language used in the field, such as FORTRAN and COBOL. Use of the computer in developing grade-point student lists, grade analysis, and student report card procedures will be discussed.

EDSU 540  Supervision of Student Teachers and Interns
Three Hours: 3 Credits

Theory and practice in supervising student teachers are given focus in this course. Experience will be provided to stimulate teachers to establish objectives for quality student teaching and internship, to develop creative approaches to professional laboratory experience, and to analyze and evaluate critically some of the emerging theory and practice in student teacher supervision. Topics will include inner city programs, teaching analysis models, micro-teaching, non-verbal communication, conference techniques, sensitivity training, reward systems, stimulation activities, and professional development schools concepts.

EDSU 541 Instructional and Managerial Strategies for the Beginning Teacher
Three Hours: 3 Credits

This course seeks to strengthen the skills necessary to assure effective classroom instruction. Specifically, this course provides the beginning teacher an opportunity to analyze and demonstrate the essential competencies identified for success in teaching within the urban environment.

EDSU 560 Supervision and Evaluation of Curriculum and Instruction
Three Hours: 3 Credits

This course provides the student with an opportunity to analyze the role of the administrator in K-12 schools as the person primarily responsible for coordinating the development of the curriculum and for establishing procedures useful to the continuous evaluation and improvement of the curriculum and instruction.

EDSU 561 The Role of the Instructional Supervisor in the Urban School
Three Hours: 3 Credits

This course provides a comprehensive view of the nature of supervision including an understanding of professional relations and trends, basic concepts of organization and planning, and leadership roles and functions as they relate to the continuing growth of teachers.

EDSU 570 Advanced Procedures in Instructional Supervision and Curriculum Development
Three Hours: 3 Credits

This course presents advanced concepts and procedures requisite for the supervision of instruction and curriculum development. It is a requirement for those preparing to be instruction supervisors. Prerequisites: EDSU.560 and CUIN 562.

EDSU 575 Problems of Administration and Supervision in Urban Schools
Three Hours: 3 Credits

The focus in this course is on problems in administration and supervision peculiar to schools in an urban setting. Effective techniques for promoting wholesale interpersonal relations are explored. Special attention is given to the dynamics of working with staff, parent and student groups, and the more promising approaches to school administration and supervision in urban locations.

EDUC 500 Introduction to Teaching
Three Hours: 3 Credits

This course is the introductory course for the Master of Arts in Teaching program. It is designed to provide students with an overview of the teaching profession and with current trends and viewpoints in American education.

EDUC 501 Cognitive Basis for Instruction
Three Hours: 3 Credits

This course is designed to acquaint the student with current research in the field of cognitive psychology. The nature of teaching as well as how teachers teach will be examined for implications for curriculum development and teaching.

EDUC 505 Field Experience in Urban Education
Three Hours: 3 Credits

This course is an adjunct experience to EDUC.506. Specifically, it is organized to illuminate and supplement the theory offered in EDUC.506-Seminar in Education. Its purpose is to help students deepen their understanding of urban education, relate theory to their previous knowledge, and test knowledge in their professional experiences. The course, conducted primarily outside the classroom, must be taken concurrently with EDUC 506.
EDUC 506   Seminar in Urban Education  
Three Hours: 3 Credits  
This course provides opportunity to work on individual problems relating to the education of the disadvantaged. Currently research problems and programs are reported and analyzed. The seminar is to be taken concurrently with EDUC 505.

EDUC 515   Utilization of Computers in Teaching  
Three Hours: 3 Credits  
This course is a survey of action research in the utilization of computers in urban and multicultural teaching. It provides knowledge and experience for pre-service and in-service teachers, and for other school personnel in (1) the preparation of instructional materials, (2) the techniques of interactive instruction, and (3) the use of tracking in content areas such as science, mathematics, and reading/language arts.

EDUC 519   The Socio-Cultural Context of Schooling  
Three Hours: 3 Credits  
This course will identify the social and cultural factors that impinge on the nature of urban schooling. Among the topics discussed are race and ethnicity, the politics and economics of education, and the history of modern urban school systems.

EDUC 523   Methods of Teaching/Content Areas  
Three Hours: 3 Credits  
This course will examine both general and specific methods of teaching at the secondary school level in various content areas. Specialists from the University disciplines that prepare teachers will join in cooperative instruction with faculty from the School of Education and Urban Studies.

EDUC 524   Student Teaching (Internship)  
12 Credits  
This course will provide an intensive semester-long internship in teaching that is cooperatively monitored and supervised by University professors and selected public school teachers in urban and suburban school systems. The university professors will work with public school clinical teachers and make periodic visits to schools for observation and conferences.

EDUC 525   Professional Development Seminar  
Three Hours: 3 Credits  
Enrollment must be concurrent with enrollment in EDUC 524-The Internship. The weekly seminar will examine selected interns. From time to time, invited speakers and panelists will share experiences with the interns.

EDUC 610   Administration of Higher Education  
Three Hours: 3 Credits  
Students examine the organization and administration of colleges and universities, and the role and function of administrators in relation to faculty, students, governing boards, and external forces.

EDUC 788-789   Supervised Research  
Three Hours: 3 Credits each course  
Each course is designed to enable students to participate in research in areas of their competence under the supervision of qualified individuals. Students are required to submit research findings orally in a seminar and to submit a written report to the graduate faculty.

EDUC 797   Thesis Guidance  
Two Hours: 2 Credits  
This guidance provides students who have not completed their thesis in the assigned semester a mechanism for continuing their work under faculty supervision.
EDUC 799 Thesis Seminar
Three Hours: 3 Credits

EDUC 997 Dissertation Guidance
Three Hours: 3 Credits
Dissertation guidance provides students who have not completed their dissertation in the assigned semester, a mechanism for continuing their work under faculty supervision.

EDUC 998 Dissertation Seminar
Six Hours: 6 Credits

ELED 521 Social Studies in the Elementary and Middle School
Three Hours: 3 Credits
This course is designed to give teachers and administrators an overview of social studies innovations, trends, and programs at the K-8 grades. The focus will be on the meanings and implications of the content of social studies materials.

GU CO 557 Principles and Practices in Student Personnel Service
Three Hours: 3 Credits
This course is designed to provide the student with a functional knowledge in the following areas: (1) background (history and philosophy) and purposes of student personnel services; (2) program and services necessary for the implementation of the student personnel point of view; (3) organization, administration, and evaluation of student personnel services.

GU CO 559 Supervising Curriculum and Instruction in the Elementary School
Three Hours: 3 Credits
This course examines the principles of supervision, program planning, improving pupil growth and achievement, and improving educational materials and techniques. Essential management functions such as communicating and motivating will also be explored. Laboratory experiences complement the theory.

GU CO 564 Diagnostic and Prescriptive Procedures in Educational Planning and Development
Three Hours: 3 Credits
This course provides techniques for interpreting and translating results from educational and psychological evaluation into classroom procedures and practices. Demonstration and observation with some testing experiences are included. Treatment strategies are presented and critically analyzed.

MAED 563 Review of Research in Instruction in Elementary/Middle School Mathematics
Three Hours: 3 Credits
This course acquaints students with historic and recent information from theory and research on teaching and learning mathematics in grades K-8. It engages students in the use of methods and materials for instruction that such information suggests.

MAED 564 Review of Research in Instruction in Middle/High School Mathematics
Three Hours: 3 Credits
This course acquaints students with historic and recent information from theory and research on teaching and learning mathematics in grades 6-12. It engages students in the use of methods and materials for instruction that such information suggests.

MAED 600 The Use of Language and Logic for the Instruction of Mathematics
Three Hours: 3 Credits
This course examines the critical use of language (words/terms, syntax/directions) for the learning and teaching of number and mathematical concepts. Special emphasis will be given to the foundational concepts of special relations and conservation, and deductive and inductive reasoning. Particular attention will be given to related research and curriculum development.
MAED 602  Strategies in Interdisciplinary Mathematics-Science and Technology  
Three Hours: 3 Credits  
Illustration and analysis of mathematical models for problems in biological, physical and applied science.

MAED 620  Action Research in Mathematics Education I  
Three Hours: 3 Credits  
This course helps to develop strategies to be used by teachers and administrators to bridge the gap between theory and practice. It assists teachers and administrators in initiating research on classroom problems related to teaching, learning and assessments.

MAED 621  Action Research in Mathematics Education I  
Three Hours: 3 Credits  
This course is a continuation of MAED.620.

MAED 680  Review of Standardized and Curricula Based Measurement and Evaluation in Elementary/Middle School Mathematics  
Three Hours: 3 Credits  
In this course, basic concepts in the use of test and inventories in mathematics for grades 6-12 are reviewed. Principles appropriate to the selection and interpretation of commonly used standardized instruments and selected curricular/teacher generated instruments are discussed.

MAED 681  Review of Standardized and Curricula Based Measurements and Evaluation in Middle/High School Mathematics  
Three Hours: 3 Credits  
In this course, basic concepts in the use of test and inventories in mathematics for grades 6-12 are reviewed. Principles appropriate to the selection and interpretation of commonly used standardized instruments and selected curricular/teacher generated instruments are discussed.

MAED 997  Dissertation Guidance  
Three Hours: 3 Credits  
Dissertation guidance provides students who have not completed their dissertation in the assigned semester, a mechanism for continuing their work under faculty supervision.

MAED 998  Dissertation Seminar  
Six Hours: 6 Credits

RDHE 691/791/891  Selected Topics in Higher Education Seminars  
1 Credit Each: Maximum of 6 Credits may be taken depending upon student need)  
These one-credit seminars involve specialty topics designed to enhance the knowledge, skills and abilities of particular doctoral students in response to the results of required diagnostic assessment at entry. The rationale for offering of “signature” or “thematic” courses to enhance a student’s competencies and outcomes is that duplication will be minimized and the extra time can be used to strengthen other professional competencies and research skills of those matriculating in the program. [Note: Similar courses may also be offered with the prefix “EDHE.”]

RDHE 701  Pro-Seminar in Higher Education  
Three Hours: 3 Credits  
This course is designed to provide a forum for the discussion of range of topics related to research, development, policy analysis, organization, administration, and management of higher education. This course, offered exclusively to students in the Ph.D. in Higher Education Program, examines the core values, structures, processes, language, and stakeholders in American higher education. Considerable emphasis is placed on the examination of the modes of inquiry and the nature of research, especially to assist the student in making an early selection of topics for the Research Practicum and the Dissertation.
RDHE 702    Historical Foundations of Higher Education
Three Hours: 3 Credits
This course is designed to provide students with an overview of the development of American higher education from the colonial period to the present, thus equipping students to understand the origin of contemporary practices and dilemmas. Special emphasis also on the contributions of African-Americans and other minority groups to the development of higher education in America.

RDHE 703    Diversity and Multiculturalism in Higher Education
Three Hours: 3 Credits
This course is designed to improve the student's understanding and working knowledge of diversity and multiculturalism as quality enhancers in higher education. It focuses particularly on best practices and utilizes case studies and the Internet as a means of providing useful applications of concepts presented and examined. Increased global awareness and the development of effective intercultural skills are also expected outcomes of the course.

RDHE 704    Higher Education Policy Analysis
Three Hours: 3 Credits
This course is designed to strengthen the capacity of students to use statistical analysis and other modes of inquiry to analyze and interpret higher education data in the development and review of higher education policies. The course will also give attention to the major theories of evaluation in educational policy through the use of the case study method.

RDHE 705    Quality Assurance and Accountability in Higher Education
Three Hours: 3 Credits
This course, a unique requirement among other Ph.D. in Higher Education preparation programs in the United States, provides through a modified Web-based format an overview of the practices and modalities in higher education related to quality assurance and accountability. It acquaints students as well with common used definitions of quality assurance, and it provides an in-depth review of best practices in accreditation, assessment (student achievement and institutional effectiveness), including such topics as TQM, CQI, and Benchmarking.

RDHE 706    Technological Applications in Higher Education
Three Hours: 3 Credits
This course is designed to develop and enhance the skills of students in making academic and administrative applications of technology to higher education practice, policy development, and research requirements. Specific emphasis will be placed on the use of software packages developed for the social sciences and education, as well as the utilization of electronic databases. Students will be expected to demonstrate their competency in applying appropriate computer applications to academic assignments and research projects.

RDHE 720    Contemporary Issues and Concepts in Higher Education
Three Hours: 3 Credits
This course, usually but not always proceeded by “Historical Foundations in Higher Education”, is designed for the discussion and analysis of a wide range of current issues and concepts in higher education. The course will rely on significant use of the Internet and World Wide Web for both written assignments and in class discussions. Students must be acquainted with current journals (including e-journals) dealing with topics in higher education.

RDHE 722    Organizational Theory and Administration/Management in Higher Education
Three Hours: 3 Credits
This course examines organizational theory, structures, systems, and administrative procedures in a variety of higher education institutions. Some patterns of governance and policy development will also be addressed. However, the student who needs a more in-depth treatment of governance should take “Governance and Coordination in Higher Education, especially if he or she already has strong competencies in organizational theory and extensive experience in the administration and management of higher education. The course will involve the use of case studies for the application of theory to practice.
RDHE 725  The American College Student  
Three Hours: 3 Credits  
This course is designed specifically for those persons who have had limited experience in higher education institutions. As such, it covers a range of topics related to the American college student, such as demographic and background characteristics; values, attitudes and perspectives. It also addresses the relationship between student profiles and relevant services that should be provided to students. Class discussions, reading assignments, Internet research, and written projects will address topics such as access, persistence and success.

RDHE 731  Governance and Coordination in Higher Education  
Three Hours: 3 Credits  
This course is designed to enhance the student’s understanding and working knowledge of organizational structure and the basic principles of coordination and control of higher education at the local, state and regional levels. Principles of leadership expressed through controlling and coordinating boards: role of boards and staff in planning, development and operation. Limited focus on state approval, and regional/national accrediting bodies. Students desiring to have more advanced competencies in the latter should consider taking “Quality Assurance and Accountability in Higher Education”.

RDHE 735  Student Affairs Administration in Higher Education  
Three Hours: 3 Credits  
This course is designed especially for the student who desires to concentrate on this particular area for administrative and research interest. It is also designed to enhance the student’s understanding of basic student development theory as applied to various models for administering student services in colleges and universities. Some focus is also directed toward contemporary issues in the management and maintenance of student affairs programs in higher education, including the examination of research in student affairs administration.

RDHE 738  Institutional Research and Planning in Higher Education  
Three Hours: 3 Credits  
This course provides an overview of the nature and scope of policy research at the institutional and state level, as well as an overview of the various approaches to strategic planning in American colleges and universities. The course also addresses the corollary requirement for data and information system to support planning processes and the policy research agenda of colleges and universities. Registration in this course requires competencies in the basic modes of inquiry, particularly statistical analysis.

RDHE 745  Student Development Theory and Research  
Three Hours: 3 Credits  
This course provides a comprehensive review and critique of key student development and environmental theories, emerging theories and models, and concepts for theory-to-practice.

RDHE 789  Field Research in Higher Education  
Three Hours: 3 Credits  
This course requires research dealing with higher education entities such as state, federal, and regulatory agencies. The student may also obtain professional experience and gain interest to professional networks such as NAFEO, ACE, HACU, WIHE, AACC, and Middle States Accreditation.

RDHE 885  Internship in Higher Education  
Three Hours: 3 Hours  
This course for those students requiring an expanded experience in higher education provides a semester long internship cooperatively monitored and supervised by university professors and selected university contacts.

RDHE 889  Research Practicum in Higher Education  
Three Hours: 3 Credits  
The practicum provides the student the opportunity to complete the prospectus for the dissertation. For the majority of students this will mean the preparation of the first three chapters of a traditional dissertation.
RDHE 997  Dissertation Guidance  
Three Hours: 3 Credits  
This course provides students who have not completed their dissertation in the assign semesters a mechanism for continuing their work under faculty supervision.

RDHE 998  Dissertation Seminar  
Six Hours: 6 Credits  
This course is design to direct students through the dissertation process with assistance from their supervisory committee.

RDHE 999  Dissertation Project  
Six Hours: 6 Credits  
The Ph.D. Program in Higher Education requires a minimum of 12 credits for the completion of the dissertation project.

REED 518  Teaching Reading in the Content Areas I  
Three Hours: 3 Credits  
This course provides an overview of the reading process in the content areas. Students will be introduced to a variety of assessment methods, instructional strategies and approaches to achieve content area goals.

REED 520  Teaching Reading in the Content Areas II  
Three Hours: 3 Credits  
This course is designed to provide students with a functional knowledge in the following areas: (1) use of a variety of assessment methods texts and technology to assist content area readers; (2) connection between reading, writing and student learning in the content areas; (3) development and implementation of content area lesson plans.

SCED 567  Strategies in Interdisciplinary Mathematics and Science Curriculum & Instruction in Elementary/Middle School Science Education  
Three Hours: 3 Credits  
This course provides illustration and analysis of mathematics for problem solving in elementary/middle school science.

SCED 573  Review of Research in Instruction in Elementary/Middle School Science Education  
Three Hours: 3 Credits  
This course acquaints students with historic and recent information from theory and research on teaching and learning science in grades K-8 and engages students in methods and materials for instruction that such information suggests.

SCED 574  Review of Research in Instruction in Middle/Secondary School Science Education  
Three Hours: 3 Credits  
This course acquaints students with historic and recent information from theory and research on teaching and learning science in grades 6-12 and engages students in methods and materials for instruction that such information suggests.

SCIE 504  Seminar in Modern Elementary Science  
Three Hours: 3 Credits  
The seminar is designed to involve students in a multitude of current and important issues in Science Education as they relate to the teaching of sciences in grades K-8. Opportunities will be provided to review current research studies in a variety of Science Education journals and publications; review the current Science Education standard; obtain free classroom materials; discuss key concepts with resource persons; explore issues such as multiculturalism, constructivism and misconceptions; examine excellent sources of information for classroom use from the world wide web (computers); and make preliminary plans for conducting science education studies.
SCIE 610  Chemical Evolution of Life  
Three Hours: 3 Credits  
This course is a multi disciplinary scientific analysis of the beginning and evolution of living organisms.

SCIE 620  Special Topics in Earth, Astrophysics and Related Planetary Sciences  
Three Hours: 3 Credits

SCIE 622  Action Research in Secondary Education I  
Three Hours: 3 Credits

SCIE 623  Action Research in Secondary Education II  
Three Hours: 3 Credits

SCIE 630  Current Issues in Environmental Science with Emphasis on Laws of Nature  
Three Hours: 3 Credits

SCIE 682  Review of Curricula Based Measurement and Evaluation in Elementary/Middle School Science  
Three Hours: 3 Credits  
This course provides the student an opportunity to analyze critically the practices, viewpoints, and research on the science curricula for elementary/middle schools.

SCIE 683  Review of Curricula-Based Measurement & Evaluation in Middle/Secondary School Science  
Three Hours: 3 Credits  
This course provides the student an opportunity to analyze critically the practices, viewpoints, and research on the science curricula for middle/secondary schools.

SCIE 711  Seminar in Science-Special Topics  
Three Hours: 1 Credit  
This course is a multidisciplinary approach which includes individual and team presentation.

SCIE 721  Instructional Terms and Language Usage in Science Education  
Three Hours: 3 Credits  
This course provides a review of instructional terms and the use of language in the instruction of science.

SCIE 722  Seminar in Science, Special Topics  
Three Hours: 1 Credit  
This course is a multidisciplinary approach which includes individual and team presentation.

SCIE 723  Seminar in Science, Special Topics  
Three Hours: 1 Credit  
This course is a multidisciplinary approach which includes individual and team presentation.

SCIE 997  Dissertation Guidance  
Three Hours: 3 Credits  
Dissertation guidance provides students who have not completed their dissertation in the assigned semester a mechanism for continuing their work under faculty supervision.

SCIE 998  Dissertation  
Six Hours: 6 Credits
SFED 510  Historical, Philosophic and Sociological Foundations of Urban Education  
Three Hours: 3 Credits  
This course examines education from the perspective of the history, sociology, and philosophy of education. Some of the major topics are social forces and schooling; the social system and culture of the school; social class differences in education; the place of philosophy in education; and functional analysis of educational problems.

SFED 582  The Exceptional Child: Administrative and Program Needs  
Three Hours: 3 Credits  
This course is designed to sensitize educators to the need for effective educational programming for exceptional children. It explores the legal basis of P.L. 94-142 and its amendments for working with handicapped children in regular educational programs. An overview of the area of special education and its implications for teaching and learning constitutes the framework for the emphasis of this course. Special attention is given to the characteristics and needs of minority handicapped students.

SFED 651  Social Policy and Futurism  
Three Hours: 3 Credits  
A detailed analysis of futurism and its implication for the development of social policy is the focus of this course. Particular emphasis is placed on a study of futurism in relation to education.
DOCTOR OF PHILOSOPHY – SOCIAL WORK

SCHOOL OF EDUCATION & URBAN STUDIES

DOCTOR OF PHILOSOPHY – SOCIAL WORK (Ph.D.)

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Program Goals
Social Work doctoral education is directed at the development and transmission of new knowledge for the profession and at the rigorous practice and evaluation of existing clinical, management, and policy approaches in social work. Scholarship in social work pursues, primarily, knowledge for practical use. It is concerned with doing so by developing theoretical and empirical understanding utilizing the full range of research methodologies. It also is concerned with developing knowledge and skills for teaching on both the undergraduate and graduate levels.

Morgan State University’s Ph.D. program in social work is uniquely designed to prepare students for leadership roles in urban social work research, policy analysis, and advocacy education, and macro social work practice. The program’s urban focus recognizes that many inner-city residents bear the brunt of the social, economic, political, and health-related problems of American society. The disproportionate occurrence of these problems in urban areas represents a crisis in American democracy. To address this crisis, the Ph.D. program in social work prepares students to apply a social justice framework to analyze and solve the catastrophic problems of contemporary urban society. Specific emphasis is on the multifaceted and sustained problems of urban minority populations. A special focus is given to the social problems that confront African American families, communities, and organizations. The program also seeks to produce persons interested in becoming professors in schools and departments of social work so that they can influence future social workers and contribute to social work’s knowledge base on urban minority populations.

Admission Requirements

- Official transcripts of all academic work completed at regionally accredited institutions of higher education
- GPA of 3.0 or better on a 4.0 scale for the last two years of undergraduate work
- GPA of 3.5 or better on a 4.0 scale on all postgraduate study beyond the baccalaureate degree
- MSW Degree from Council on Social Work Education accredited program. Persons with other related graduate degrees also are encouraged to apply, but they will be required to enroll in a social work urban practice internship.
- Official results of the GRE (Graduate Record Examination)
- International students, whose native language is not English, must provide a TOEFL score of 550 or higher and demonstrate through the required written documentation and interview that they have requisite verbal and analytical skills needed to successfully complete the program.
- A 3 to 4 page, double-spaced written statement of the applicant’s interest and career goals that must address five questions: 1) What career objectives do you envision with a Ph.D. in social work? 2) What specific area of research do you plan to pursue if admitted into the Ph.D. program? 3) How have your professional experiences influenced your interest in pursuing a Ph.D. in social work? 4) What specifically attracts you to the social work doctoral program at Morgan State University? and 5) How prepared are you for the personal, emotional, and time demands of doctoral training?
• A current resume or curriculum vitae documenting professional experiences.

• Samples of professional writing, including publications and research proposal abstracts, if available.

• Data from personal interview.

• Three letters of recommendation: one (1) from a recent work experience, and two (2) academic references.

General Requirements
The Ph.D. Program in Social Work consists of 42 credits in the core curriculum and 15 credits of dissertation research for a total of 57 credits to complete the program. The program is primarily for full-time students, but a part-time option is available for special or unusual circumstances. Full-time students are expected to complete the program within four years or sooner. There is a seven-year statute of limitation for completion of the Ph.D. Degree in Social Work. Students must complete the 42 core credits with grades of B or above before applying to take the comprehensive examination. The comprehensive examination must be passed prior to movement into the dissertation phase of the program. Students may repeat the comprehensive examination only once. Students must submit an approved dissertation in partial fulfillment of the Ph.D. in Social Work. When the dissertation has been completed to the satisfaction of the dissertation chairperson and committee members, a dissertation defense will be scheduled at which time the student must orally defend the dissertation before the dissertation committee. Graduation from the program is dependent upon successful completion of a dissertation.

Program of Study
The following core curriculum, consisting of 42 credit hours, and 15 credit hours of dissertation, are required of all doctoral students in social work. Elective courses are specified with “Elective” in parentheses, and students are required to take only two electives:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>SOWK 701</td>
<td>History of Social Welfare Policy</td>
<td>3</td>
</tr>
<tr>
<td>SOWK 702</td>
<td>Social Work and Human Services Statistics I</td>
<td>3</td>
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<tr>
<td>SOWK 703</td>
<td>Research Methods for Urban Social Institutions</td>
<td>3</td>
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<tr>
<td>SOWK 704</td>
<td>Knowledge and Theory Development for Urban Social Work</td>
<td>3</td>
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<tr>
<td>SOWK 705</td>
<td>Contemporary Social Policy Analysis</td>
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<tr>
<td>SOWK 706</td>
<td>Social Work and Human Services Statistics II</td>
<td>3</td>
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<tr>
<td>SOWK 801</td>
<td>Administration, Management, and Organizational Policy (Elective)</td>
<td>3</td>
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<tr>
<td>SOWK 802</td>
<td>Qualitative Methods in Social Work</td>
<td>3</td>
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<tr>
<td>SOWK 803</td>
<td>Urban Family Theories</td>
<td>3</td>
</tr>
<tr>
<td>SOWK 804</td>
<td>Social Work with Urban Organizations and Communities</td>
<td>3</td>
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<tr>
<td>SOWK 805</td>
<td>Advanced Statistics for the Human Services</td>
<td>3</td>
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<tr>
<td>SOWK 806</td>
<td>Program Evaluation (Elective)</td>
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<tr>
<td>SOWK 807</td>
<td>Issues in Social Work Pedagogy and Education</td>
<td>3</td>
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<td>SOWK 808</td>
<td>Teaching Practicum in Social Work Education</td>
<td>3</td>
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<tr>
<td>SOWK 809</td>
<td>Health Policy Issues and Practice (Elective)</td>
<td>3</td>
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<tr>
<td>SOWK 997</td>
<td>Dissertation Guidance</td>
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<tr>
<td>SOWK 998</td>
<td>Dissertation Seminar</td>
<td>6</td>
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</table>
DOCTORAL SOCIAL WORK PROGRAM COURSE DESCRIPTIONS

SOWK 701  History of Social Welfare Policy  
Three Hours: 3 Credits  
This course provides information on the history and evolution of professional social work and social welfare values, practices, policies, and organizations in the United States. Covering the history of American social welfare from colonial times, this course places considerable emphasis on the effects of social, cultural, political, and economic factors on the development of social welfare policies and the social work profession.

SOWK 702  Social Work and Human Services Statistics I  
Three Hours: 3 Credits  
This course equips students with basic statistical techniques. Students will learn to apply descriptive and some intermediate statistical procedures to social problems and human service programs. In addition, beginning knowledge and use of computer statistical software packages will be emphasized.

SOWK 703  Research Methods for Urban Social Institutions  
Three Hours: 3 Credits  
This course examines the assumptions and the underlying logic and methods of social science research. Special attention is given to an examination of the sundry methods of social science data collection, to the criteria that determine the selection of a specific method, and to an understanding of the strengths and limitations of the various methods. These methods are explained and their applicability examined within the context of urban social institutions.

SOWK 704  Knowledge and Theory Development for Urban Social Work  
Three Hours: 3 Credits  
This course will present an in-depth exploration of a broad array of psychological, socio-cultural, political, and economic theories that undergird urban social work knowledge, values, and skills. Theories relevant to community development and empowerment will also be included. Tools and skills of analysis will be emphasized as these form the basis of urban social work practice and research.

SOWK 705  Contemporary Social Policy Analysis  
Three Hours: 3 Credits  
This course provides students with frameworks and methods of analyzing contemporary social welfare policies and the programs through which they are implemented. The course also explores the dimensions of policy analysis including policy development, implementation, management, and control, and it examines methods and dilemmas of policy advocacy for urban populations.

SOWK 706  Social Work and Human Services Statistics II  
Three Hours: 3 Credits  
This course acquaints students with more intermediate statistical procedures that is begun in SOWK 702, but also introduces students to the logic, significance, and appropriate application of advanced (i.e., multivariate) statistical procedures. In addition, intermediate knowledge and use of computer statistical software packages will be emphasized.

SOWK 801  Administration, Management, and Organizational Policy  
Three Hours: 3 Credits  
This course introduces students to theoretical and applied approaches to human service administration, leadership, management and policy development. Emphasis is placed on human resource development and management and program development and implementation.
SOWK 802  Qualitative Methods in Social Work Research  
Three Hours: 3 Credits  
The course is designed to prepare students to conduct ethnographic participatory action research. Students will master methods such as interpreting qualitative data and building theory; qualitative methods of analysis, such as successive approximation and analytic comparison; and the use of computer software for qualitative data.

SOWK 803  Urban Family Theories  
Three Hours: 3 Credits  
This course familiarizes students with various theories, perspectives, and methodologies used to study the structure and functioning of urban minority families focusing on conceptual models commonly used in family analysis: family structure and functionalism, interactionism, exchange theory, conflict theory, and the family developmental perspective.

SOWK 804  Social Work With Urban Organizations And Communities  
Three Hours: 3 Credits  
This course examines urban organizations and communities with a focus on community-based agencies as levels of macro intervention for problem solving with urban and historically oppressed populations. The course will focus on administrative roles, organizational management, resource acquisition, planning, and community relations in a context of financial devolution.

SOWK 805  Advanced Statistics For The Human Services  
Three Hours: 3 Credits  
This course focuses exclusively on multivariate analyses that are commonly used in social work and human services research. These procedures are ordinary least squares multiple regression, logistic regression, and structural equation models. In addition, advanced knowledge and use of computer statistical software packages will be emphasized.

SOWK 806  Program Evaluation  
Three Hours: 3 Credits  
This course provides students with an in-depth look at, and assessment of, evaluation methods in social work practice, administration, and policy. It prepares students to systematically evaluate the effectiveness and efficacy of human service interventions with urban populations.

SOWK 807  Issues In Social Work Pedagogy And Education  
Three Hours: 3 Credits  
This course examines the role and structure of social work education at the BSW, MSW and Ph.D. levels. The course will emphasize pedagogical issues in social work education, curriculum development, educational design, and instructional delivery. Emphasis will be placed on preparing students for effective and competent teaching and the transmission of knowledge and skills in academic and agency settings.

SOWK 808  Teaching Practicum In Social Work Education  
Three Hours: 3 Credits  
Doctoral students will teach a social work course at the BSW or MSW level under the supervision of a faculty mentor.

SOWK 809  Health Policy Issues and Practice  
Three Hours: 3 Credits  
This course presents an overview and analyses of critical health policy issues that disproportionately and adversely affect urban populations. This course also examines the various macro practice methods used to resolve these issues from a social justice perspective.
SOWK 997  Dissertation Guidance  
Three Hours: 3 Credits  
This seminar is designed to help students develop and conduct their dissertation research. This seminar is conducted informally with assistance provided by the student’s dissertation chairperson/advisor and other committee members. Students register for this course until they are prepared to register for Dissertation Seminar (SOWK 998).

SOWK 998  Dissertation Seminar  
Students register for this course to complete the dissertation and to receive a letter grade when the dissertation has been approved by the dissertation committee and the Dean of the School of Graduate Studies. This course is taken only once.

Doctoral Dissertation  
The doctoral dissertation provides students who have completed the core curriculum and passed the comprehensive examination with an opportunity to devise and conduct original research. Students must complete 15 credit hours of dissertation research. In the event the dissertation is not completed within the 15 credit hours, students must continue to register for Dissertation Guidance (SOWK 997) until the dissertation has been completed and approved.

Comprehensive Examination  
The comprehensive examination is designed to evaluate the degree to which doctoral students have successfully mastered content presented in the core curriculum. This in-class examination is written and spans over a one and a half day period in which students respond to questions in each core curriculum area. The core areas are 1) theories and methods of urban social work, 2) social welfare history and policy analysis, and 3) research methods and statistics. Students must pass the comprehensive examination prior to moving to the dissertation phase of the program. Students are only eligible to re-take the comprehensive examination one time.

Transfer Credits  
Students who have taken doctoral courses in social work and interested in transferring to the Ph.D. Program at Morgan must submit course syllabi for evaluation by the Director of the Ph.D. Program. No more than twelve (12) semester credit hours can be transferred, and these transfer credits cannot be applied until the student has taken at least twelve (12) semester credit hours in the Ph.D. program at Morgan.

Full-Time Course Sequence  
**Fall (1st Year)**
- SOWK 701  History of Social Welfare Policy  3
- SOWK 702  Social Work and Human Services Statistics I  3
- SOWK 703  Research Methods for Urban Social Institutions  3

**Spring (1st Year)**
- SOWK 704  Knowledge and Theory Development for Urban Social Work  3
- SOWK 705  Social Policy Analysis  3
- SOWK 706  Contemporary Social Work and Human Services Statistics II  3

**Fall (2nd Year)**
- SOWK 802  Qualitative Methods in Social Work Research  3
- SOWK 803  Urban Family Theories  3
- SOWK 804  Social Work with Urban Organizations and Communities  3
- SOWK 805  Advanced Statistics for the Human Services  3
Spring (2nd Year)
SOWK 807 Issues in Social Work Pedagogy and Education 3
SOWK 808 Teaching Practicum in Social Work Education 3
SOWK Elective 3
SOWK Elective 3

Fall (3rd Year)
SOWK 997 Dissertation Guidance 3

Spring (3rd Year)
SOWK 997 Dissertation Guidance 3

Fall (4th Year)
SOWK 997 Dissertation Guidance 3

Spring (4th Year)
SOWK 998 Dissertation Seminar 6

Total=57 hours
MASTERS OF SOCIAL WORK (MSW)

Anna R. McPhatter, Ph.D, LCSW
Chair, Department of Social Work
Jenkins Behavioral Sciences Building, Room 422
Tel: 443.885.3537; Fax: 443.885.8241
E-Mail:AMcPhatter@moac.morgan.edu

Program Goals and Objectives
The goal of the Masters Degree in Social Work Program is to prepare advanced social work practitioners to practice competently and effectively with urban families, groups, organizations, and communities. The program is committed to the alleviation of human suffering and the improvement of the quality of life for urban residents. Because African Americans make up a substantial percentage of the urban population, and are also over-represented among urban residents facing unremitting social and economic problems, the program has a major focus on preparing its graduates to address, systematically and strategically, issues of poverty and socioeconomic disadvantage, interpersonal and community violence, substance abuse and mental health problems, social injustice and discrimination. In addition, the program’s goals include the following:

To prepare autonomous practitioners committed to working competently and effectively with urban individuals, families, groups, organizations and communities.
To socialize students to the values and ethics of the profession of social work,
To address challenges, issues and problems of the urban environment toward the alleviation of human suffering and enhancing the quality of life of oppressed, at-risk, and vulnerable urban populations.
To develop an appreciation for the historical and contemporary contributions of African Americans to the field of social welfare as a context for urban social work practice.
To prepare students with the knowledge, skills and commitment to address oppression and social injustice in all forms.
To promote the fullest understanding of the reality and complexity of human diversity as a basis for culturally competent social work practice.

Admission
Admission to the MSW Program is granted only in the fall semester and, in addition to the requirements of the School of Graduate Studies, is based on the following:

Three letters of recommendations from social work professionals, employers or academicians
Career objectives as outlined in an entrance essay to be completed by the applicant
Documentation of previous academic achievement, professional accomplishments, and earned degrees (official transcripts)
Interviews may be required with the Social Work Admissions Committee

Students who have completed the BSW degree from a Council on Social Work Education accredited Social Work Program may qualify for admission into the Advanced Standing Program if they meet the following criteria:

Completed the BSW within the past seven years
Graduated with a 3.0 overall grade point average or better
Recommendation from the Chair/Program Director of the BSW Program from which student matriculated
Recommendation from Social Work professional

Students admitted under the above criteria for Advanced Standing may receive up to 30 credits of the Foundation Year of the program.

General Requirements
Students admitted to the Masters of Social Work degree program who are not admitted for Advanced Standing must complete 48 credits of course work and 12 credits of supervised internship. The program may be completed in two years of full time course and field work or three years of part time course and field work. Students accepted for Advanced Standing must have their social work courses evaluated for acceptance toward the degree requirements. There is a five year statute of limitation on the completion of the program. Students are not given credit for life experience in the program and may not receive credit for course work completed at a non-accredited social work program.
Program of Study
The MSW Program is designed around the Foundation Year, which requires students to complete course work and field practicum focused on generalist social work practice, and the Concentration Year in which students select a Concentration. Concentrations build on the Foundation curriculum, increasing in depth and breadth, by providing specialized course content and practicum experience in a field of practice. Concentration options include Urban Children, Youth and Families, School Social Work, Gerontology, and Public Health Social Work and require 12 credits of concentration specific course work and 6 credits of concentration field practicum. The following courses make up the Foundation Year of the program:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOWK 501</td>
<td>Generalist Social Work Practice</td>
<td>3</td>
</tr>
<tr>
<td>SOWK 502</td>
<td>Neighborhood Advocacy and Development In Poor Urban Communities</td>
<td>3</td>
</tr>
<tr>
<td>SOWK 503</td>
<td>Foundation Practicum I (16 hours/week)</td>
<td>3</td>
</tr>
<tr>
<td>SOWK 504</td>
<td>Foundation Practicum II (16 hours/week)</td>
<td>3</td>
</tr>
<tr>
<td>SOWK 505</td>
<td>Life Course Development &amp; Issues (HBSE I)</td>
<td>3</td>
</tr>
<tr>
<td>SOWK 506</td>
<td>Urban Organizations, Neighborhoods &amp; Communities (HBSE II)</td>
<td>3</td>
</tr>
<tr>
<td>SOWK 507</td>
<td>Social Welfare &amp; Urban Economics</td>
<td>3</td>
</tr>
<tr>
<td>SOWK 508</td>
<td>Organizational Policy &amp; Leadership in Human Services</td>
<td>3</td>
</tr>
<tr>
<td>SOWK 509</td>
<td>Chemical Dependency &amp; Community Violence: Urban Perspectives</td>
<td>3</td>
</tr>
<tr>
<td>SOWK 510</td>
<td>Research and Urban Social Problems</td>
<td>3</td>
</tr>
</tbody>
</table>

The Advanced Year (Concentration) includes the following courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>SOWK 601</td>
<td>Psychopathology &amp; Clinical Intervention</td>
<td>3</td>
</tr>
<tr>
<td>SOWK 602</td>
<td>Social Work Practice with Urban Black Families</td>
<td></td>
</tr>
<tr>
<td>SOWK 603</td>
<td>Advanced Field Practicum III (24 hours/week)</td>
<td>3</td>
</tr>
<tr>
<td>SOWK 604</td>
<td>Advanced Field Practicum IV (24 hours/week)</td>
<td>3</td>
</tr>
<tr>
<td>SOWK 610</td>
<td>Evaluation Research of Urban Social Problems, Services &amp; Interventions</td>
<td>3</td>
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</table>

Urban Children, Youth and Families Concentration

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>SOWK 630</td>
<td>Urban Child Welfare</td>
<td>3</td>
</tr>
<tr>
<td>SOWK 631</td>
<td>Child Abuse &amp; Neglect</td>
<td>3</td>
</tr>
<tr>
<td>SOWK 632</td>
<td>Juvenile Justice: Prevention, Development and Intervention</td>
<td>4</td>
</tr>
<tr>
<td>SOWK 643</td>
<td>Popular Youth Culture (Elective)</td>
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Gerontology Concentration

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>SOWK 620</td>
<td>Urban Social Work Practice with the Aged and their Families</td>
<td>3</td>
</tr>
<tr>
<td>SOWK 621</td>
<td>Social Forces Affecting Older Adults and their Families</td>
<td>3</td>
</tr>
<tr>
<td>SOWK 622</td>
<td>Coping with Losses and Grief</td>
<td>3</td>
</tr>
<tr>
<td>SOWK 623</td>
<td>Seminar: Implications of Intergenerational Issues for Urban Adults (Elective)</td>
<td>3</td>
</tr>
</tbody>
</table>

Public Health Social Work

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>SOWK 650</td>
<td>Social Work Practice in Health and Disease Prevention</td>
<td>3</td>
</tr>
<tr>
<td>SOWK 651</td>
<td>Epidemiology</td>
<td></td>
</tr>
<tr>
<td>SOWK 652</td>
<td>Maternal and Child Health Macro Practice, Programs and Policies</td>
<td>3</td>
</tr>
<tr>
<td>SOWK 653</td>
<td>Public Health Policy, Urban Health Services, Issues and Planning</td>
<td>3</td>
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</tbody>
</table>

** School Social Work Concentration

**SUMMARY FOR MSW DEGREE COURSE WORK**

<table>
<thead>
<tr>
<th>Course Type</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>Foundation Courses</td>
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</tr>
<tr>
<td>Foundation Field Practicum</td>
<td>6</td>
</tr>
<tr>
<td>Advanced/Concentration Courses</td>
<td>24</td>
</tr>
<tr>
<td>Concentration Practicum</td>
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</tr>
<tr>
<td>Total Credits for the Master's Degree in Social Work (MSW)</td>
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</tr>
</tbody>
</table>
### Sample 2 Year Program

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOWK 640</td>
<td>Social Work in Urban Schools</td>
<td>3</td>
</tr>
<tr>
<td>SOWK 641</td>
<td>Schools in Communities</td>
<td>3</td>
</tr>
<tr>
<td>SOWK 642</td>
<td>Urban Social Work and Special Education</td>
<td>3</td>
</tr>
<tr>
<td>SOWK 643</td>
<td>Popular Youth Culture</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Year 1

**Fall Semester**

- Generalist Social Work Practice: SOWK 501 (3)
- Life Course Development & Issues (HBSE I): SOWK 505 (3)
- Social Welfare & Urban Economics: SOWK 507 (3)
- Research & Urban Social Problems: SOWK 510 (3)
- **Foundation Practicum I (16 hours/week): SOWK 503 (3)**

**Spring Semester**

- Neighborhood Advocacy and Development in Poor Urban Communities: SOWK 502 (3)
- Urban Organizations, Neighborhoods & Communities (HBSE II): SOWK 506 (3)
- Organizational Policy & Leadership in Human Services: SOWK 508 (3)
- Chemical Dependency & Community Violence: SOWK 509 (3)
- Foundation Practicum II (16 hours/week): SOWK 504 (3)

#### Year II

**Fall Semester**

- Psychopathology & Clinical Intervention: SOWK 601 (3)
- Evaluation Research of Urban Social Problems Services & Interventions: SOWK 610 (3)
- Advanced Practicum III (24 hours/week): SOWK 603 (3)
- Required Concentration Course
- Required Concentration Course

**Spring Semester**

- Social Work Practice with Urban Black Families: SOWK 602 (3)
- Advanced Practicum IV (24 hours/week): SOWK 604 (3)
- Required Concentration
- Required Concentration
- Elective

**Total Credits**: 60

### Concentrations:

- Urban Children Youth & Families
- School Social Work
- Gerontology
- Public Health Social Work

**Field Practicum**

Please note that a field practicum is required for each semester of the program. Sixteen (16) hours per week for the Foundation Practicum and twenty-four (24) hours per week for the Advanced Practicum are required.
MSW Program

Sample 3 Year Program

Year 1

Fall Semester

Life Course Development & Issue (HBSE I) SOWK 505 (3)
Social Welfare & Urban Economics (Policy) SOWK 507 (3)

Spring Semester

Urban Organizations, Neighborhoods & Communities (HBSE II) SOWK 506 (3)
Research and Urban Social Problems SOWK 510 (3)

Year 2

Fall Semester

Generalist Social Work Practice SOWK 501 (3)
Neighborhood Advocacy and Development in Poor Urban Communities SOWK 502 (3)
** Foundation Practicum I (16 hours/week) SOWK 503 (3)

Spring Semester

Chemical Dependency & Community Violence SOWK 509 (3)
Organizational Policy & Leadership in Human Services SOWK 508 (3)
Foundation Practicum II (16 hours/week) SOWK 504 (3)

Year 3

Fall Semester

Psychopathology & Clinical Intervention SOWK 601 (3)
Evaluation Research of Urban Social Problems, Services and Interventions SOWK 610 (3)
Advanced Field Practicum III (24 hours/week) SOWK 603 (3)
Required Concentration (3)
Required Concentration (3)

Spring Semester

Urban Black Families SOWK 602 (3)
Advanced Practicum IV (24 hours/week) SOWK 604 (3)
Required Concentration (3)
Elective (3)

Total Credits 60

Concentrations:
Urban Children, Youth & Families
School Social Work
Public Health Social Work
Gerontology

**Field Practicum
Please note that students who elect the 3 year program are required to complete sixteen (16) hours per week of field practicum each semester in the foundation year (second year) and twenty-four (24) hours per week in the advanced year (third year).

Note:
Students who select the 3 year program must plan for the third year which is full time. The statute of limitations for graduate studies is five years.

## Advanced Standing Program

### Sample 1 Year Program

#### Fall Semester
- Psychopathology & Clinical Intervention SOWK 601 3
- Evaluation Research of Urban Social Problems SOWK 610 3
- Advanced Practicum III (24 hours/week) SOWK 603 3
- Required Concentration Course 3
- Required Concentration Course 3
- **TOTAL 15**

#### Spring Semester
- Urban Black Families SOWK 602 3
- Advanced Practicum IV SOWK 604 3
- Required Concentration Course 3
- Elective 3
- Elective 3
- **TOTAL 15**

**PROGRAM TOTAL 30**

### Sample 2 Year Program

#### Fall Semester Year 1
- Psychopathology & Clinical Intervention SOWK 601 3
- Evaluation Research of Urban Social Problems SOWK 610 3
- **TOTAL 6**

#### Spring Semester Year 1
- Urban Black Families SOWK 602 3
- Required Concentration Course 3
- **TOTAL 6**

#### Fall Semester Year 2
- Required Concentration 3
- Required Concentration 3
- Advanced Practicum III SOWK 603 3
- **TOTAL 9**

#### Spring Semester Year 2
- Advanced Practicum IV SOWK 604 3
- Elective 3
- Elective 3
- **TOTAL 9**

**PROGRAM TOTAL 30**
SOCIAL WORK PROGRAM COURSE DESCRIPTIONS

SOWK 501 Generalist Social Work Practice
Three Hours: 3 Credits
This course is the first course in the methods sequence and introduces students to the profession of social work and the methods of social work practice. The course explores historical developments that shaped the profession and techniques of generalist practice. The course introduces theories that provide the basis for social work interventions and values and ethics that undergird professional social work practice.

SOWK 502 Agency and Neighborhood Development in Poor Urban Communities
Three Hours: 3 Credits
This course is the second in the methods sequence and builds on the generalist practice framework. Social work practice with urban communities and organizations is the major focus. Community organizing and social planning provide the frame of reference for skills development.

SOWK 503 Foundation Field Practicum I
3 Credits
Students are assigned to an approved social service agency 16 hours per week under the supervision of an experienced social work professional. Field placements provide students the opportunity to integrate social work theory within an ethical framework and apply skills within an agency setting and urban community context. The field setting will enable students to develop a greater respect for diversity and practice with populations at risk, to utilize critical thinking and problem solving, and to develop comfort in the professional role.

SOWK 504 Foundation Field Practicum II
Three Credits
Students will gain direct practice experience in dealing with a range of human and social problems utilizing a network of urban, community-based agencies. Students will gain advanced training while participating in the treatment process under the direct supervision of an experienced, agency-based social worker. Second year students will complete a field practicum 24 hours per week in the area of their selected concentration.

SOWK 505 Life Course Development and Issues (HBSE I)
Three Hours: 3 Credits
This course examines the major social science theories that inform the social work profession’s understanding of human behavior from a social systems perspective. Development across the life span is conceptualized as the interplay between nature and nurture where biological and psychosocial risk influence individual resiliency and environmental competence.

SOWK 506 Urban Organizations, Neighborhoods & Communities (HBSE II)
Three Hours: 3 Credits
This course emphasizes several aspects of macro practice within an ecological perspective. Students learn how to assess characteristics, dynamics, strengths, and problems of human service and community-based organizations, service delivery systems, and urban communities. An ecological systems framework together with a developmental approach is used to provide an interactional understanding of human behavior.

SOWK 507 Social Welfare and Urban Economics
Three Hours: 3 Credits
This course explores historical dynamics of class, race, and other oppressions impacting U.S. social welfare policy. It analyzes groups’ struggles for empowerment directing community action toward urban injustices. Students become familiar with political strategies, organizational tools and social work values effectuating social change.

SOWK 508 Organizational Policy and Leadership in Human Service Programs
Three Hours: 3 Credits
This course will focus on the purpose, development, policies and functions of human service organizations within the urban context. Emphasis will be placed on organizational history, theoretical frameworks for human services management, budgeting and fiscal management, cultural competence, and leadership skills.
SOWK 509  Chemical Dependency and Community Violence: Urban Perspectives  
Three Hours: 3 Credits  
The two parts of this course cover alcohol and other drug abuse (AODA) and inner-city violence. These problems are analyzed from an ecological perspective, i.e., examined in relationship to race, values, social welfare policies, urban institutions, community groups, and individuals.

SOWK 510  Research and Urban Social Problems  
Three Hours: 3 Credits  
The social work research curriculum is designed to help students develop into effective practitioners/researchers. The course includes content on ethical standards of scientific inquiry, research design for qualitative and quantitative research, analyses and reporting, practice evaluation, and the utilization of research. Students will critically review research reports on urban social problems in the media and professional journals.

SOWK 601  Psychopathology and Clinical Intervention  
Three Hours: 3 Credits  
This course is designed to fully acquaint students with the DSM IV-TR (Diagnostic and Statistical Manual of Mental Disorders, 4th Edition, Text Revision). As a text, this manual provides a descriptive approach for diagnosis of childhood and adult mental disorders and the criteria for diagnosing mental disorders. Case studies representing the major mental disorders will serve as the tool for developing treatment planning and clinical intervention.

SOWK 602  Social Work Practice with Urban Black Families  
Three Hours: 3 Credits  
This advanced practice course will expand the development and application of empowerment and strengths-based interventions for the purpose of creating alternative African-centered healing models for practice with African/Black American families. The course will combine a historical overview of African/Black American families with an emphasis on the obstacles they encounter as threats to healthy development and family functioning. Special attention is devoted to unraveling the effects of African cultural legacies, slavery, and institutional racism on urban Black family life.

SOWK 603, 604  Concentration Field Practicum III & IV  
Six credits  
The Concentration Field Practica are intended to help students develop expanded knowledge, values, and skills in their area of concentration. Students are assigned to an approved social service agency under the supervision of an experienced professional three full days per week per semester. The focus of the concentration practica is to enable students to integrate the advanced level of knowledge and skills learned in concentration practice methods courses into their field internship experiences.

SOWK 610  Evaluation Research of Urban Social Problems, Services, & Interventions  
Three Hours: 3 Credits  
This course further develops the use of research knowledge and skills learned in undergraduate programs or in the foundation research course. The primary goals of the course are to evaluate research findings relevant to urban problems and practitioners’ concerns, use the scientific research methods to answer research questions relevant to practice and policy, and collect and analyze data and present research findings, with particular application to program evaluation.

SOWK 620  Urban Social Work Practice with the Aged and their Families  
Three Hours: 3 Credits  
This course is designed to provide students with specialized knowledge necessary for advanced social work practice with urban older adults and their families, especially African Americans. Case management and clinical interventions with vulnerable and oppressed client/client families will form the basis of the course. Students will sharpen their skills in advanced clinical bio-psycho-social, mental health and other types of assessments.

SOWK 621  Social Forces Affecting Older Adults and their Families  
Three Hours: 3 Credits  
This course will take a comprehensive look at the effects of social forces on the welfare of older urban people of color, their families and communities. These social forces include: crime, violence, underground economies, misogyny, inadequate housing, incarceration, health disparities, the long term impact of unequal educational opportunities, environmental risk factors and continuous racial oppression. Current models used in urban settings to address these social forces and culturally appropriate interventions toward systems and individual behavioral change will be emphasized.
SOWK 622    Coping with Losses and Grief  
Three Hours: 3 Credits  
In this course, students will examine the range of losses elders experience during late adulthood such as: death of family members and friends; loss of a role in the family and/or their caregiver, loss of security in their environment, loss of a sense of dignity in their community, loss of mobility and social functioning and interaction, loss of contact with relatives due to separation and/or divorce. Social theories and best practice models to address these types of losses will be explored.

SOWK 623    Implications of Intergenerational Issues for Urban Older Adults  
Three Hours: 3 Credits  
This seminar will utilize an intergenerational perspective as it focuses on: publicly and privately funded intergenerational programs, grandparents raising grandchildren, and elder abuse. The course will facilitate a joint beneficial activity for students to apply program development and evaluation knowledge to urban agencies that provide services to community residents of all ages.

SOWK 630    Urban Child Welfare  
Three Hours: 3 Credits  
This course is designed to prepare students with the knowledge, ethics, and skills for effective practice in the field of urban child welfare. The course will explore the history, evolution, and current status of child welfare policies, the service continuum provided to families and children, and the socio-cultural context of child welfare practice. Emphasis will be placed on culturally competent assessment, intervention, and evaluation strategies as their relevance to poor, urban, and African American families and communities.

SOWK 631    Child Neglect and Abuse  
Three Hours: 3 Credits  
This course presents an examination from historical and contemporary perspectives the medical, legal, psychosocial, and cultural aspects of child maltreatment. A variety of theoretical frameworks will be explored as they guide an understanding of the societal, familial and community dynamics that engender child neglect, physical, sexual, and emotional abuse. Specific attention will be paid to cultural strengths and community assets that prevent child maltreatment and promote healthy psychosocial development of children and families.

SOWK 632    Juvenile Delinquency: Prevention, Development & Intervention  
Three Hours: 3 Credits  
This course is designed to provide an in-depth understanding of the nature and extent of juvenile delinquency and its impact within the juvenile justice system. The role of social workers in the juvenile justice system will be explicated related to practice with urban individuals, families and communities. Prevention, development, and intervention approaches will be emphasized in the course.

SOWK 640    Social Work in Urban Schools  
Three Hours: 3 Credits  
This seminar is the first of three courses in the School Social Work Concentration. It introduces social work roles, core principles, concepts, and techniques which underlie generalist social work practice in school settings. The course explores practice models used by school social workers and helps students understand the unique role of school social workers in the lives of children. Emphasis will be on the development of knowledge and competencies with urban populations.

SOWK 641    Schools in Communities  
Three Hours: 3 Credits  
This advanced course is an opportunity for critical analysis of the ecological systems model so widely utilized in the social work profession. It explores the relationship between schools and their communities with particular emphasis on the role of the community in the learning, culture, and extra-curricular activities of the school. The role of children and youth as members of the community, and their responsibility as citizens, will be a central theme for helping social workers develop community models to improve public schools and the quality of life for urban children and youth attending them.

SOWK 642    Urban Social Work & Special Education  
Three Hours: 3 Credits  
This course offers a unique examination of social work practice in school settings with special emphasis on special education. The course will explore the historical, legislative (ADA/Section 504 inclusion laws), and litigative history of special education, as well as models, theories, and philosophies that provide the basis for special education practice. The course will also provide an in-depth look at tools that social workers have available to them as school social workers in practice with the urban school population with special education needs and issues.
SOWK 643  Popular Youth Culture
Three Hours: 3 Credits
This course is an elective in the School Social Work Concentration and may be taken as the elective for other concentrations. The course undertakes a critical analysis of problems facing urban youth and the development of innovative solutions that lead to youth empowerment. Innovative prevention, intervention and treatment approaches to bridge gaps between youth, their families, communities and society at large are prescribed as models for engaging urban youth and embracing popular youth culture.

SOWK 650  Social Work Practice in Health Promotion and Disease Prevention
Three Hours: 3 Credits
This course teaches practice models and multi-level methods of intervention for general health promotion and prevention in public health social work practice with urban populations. Examples of topics covered in the course include: promotion screening and early intervention, child health and safety; promotion of healthy aging; violence prevention (domestic, youth), and environmental health risks.

SOWK 651  Epidemiology
Three Hours: 3 Credits
This course presents a comprehensive review of the distribution and determinants of disease in human populations and the application of epidemiological and bio-statistical procedures to understanding the occurrence and control of conditions such as infections and chronic diseases, mental disorders, community and environmental health hazards, and geriatric problems. The course introduces epidemiologic definitions, a review of vital statistics and other sources of public health data, methods for calculating distributions, behavior of diseases, sampling methods, study designs, and measurement outcomes.

SOWK 652  Maternal and Child Health Macro Practice, Programs and Policies
Three Hours: 3 Credits
This course provides an overview of maternal and child health including history, legislation, key public health issues, health and social welfare policies and programmatic responses to such issues as maternal and infant mortality, child and adolescent health, immigrant health, male reproductive health, and special needs of children and their families. Program and policy development and familiarity with various professional roles in addressing public health problems impacting children and families will be emphasized.

SOWK 653  Public Health Policy, Urban Health Services and Planning
Three Hours: 3 Credits
This course examines the formulation and implementation of health policy in the U.S. health care system. Emphasis is on the application of analytical contributions from health economics, health services research, and other policy-related disciplines to current issues in urban health care delivery, organization, and financing.
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<tr>
<th>DEPARTMENT</th>
<th>BUILDING</th>
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<tbody>
<tr>
<td>Academic Affairs</td>
<td>300 Truth Hall</td>
<td>(443) 885-3350</td>
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<tr>
<td>Accounting &amp; Finance</td>
<td>613 McMechen Hall</td>
<td>(443) 885-3445</td>
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<tr>
<td>Accounts Payable</td>
<td>216 Montebello Complex</td>
<td>(443) 885-3057</td>
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<tr>
<td>Admissions</td>
<td>109 Montebello Complex</td>
<td>(443) 885-3000</td>
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<tr>
<td>Alumni Affairs</td>
<td>Alumni House</td>
<td>(800) 332-6674 or (443) 885-3015</td>
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<tr>
<td>Architecture &amp; Planning</td>
<td>108 Montebello Complex</td>
<td>(443) 885-3225</td>
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<td>Art Gallery</td>
<td>G-15 Murphy Fine Arts Center</td>
<td>(443) 885-3030</td>
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<tr>
<td>Arts and Sciences</td>
<td>231 Holmes Hall</td>
<td>(443) 885-3090</td>
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<td>Bear Necessity</td>
<td>Lobby Montebello Complex</td>
<td>(443) 885-4045</td>
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<tr>
<td>Biology</td>
<td>G-12 Spencer Hall</td>
<td>(443) 885-3070</td>
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<td>Board of Reaents</td>
<td>400 Truth Hall</td>
<td>(443) 885-3086</td>
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<tr>
<td>Bookstore</td>
<td>Student Center</td>
<td>(443) 885-3075</td>
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<tr>
<td>Bursar Office</td>
<td>124 Montebello Complex</td>
<td>(443) 885-3108</td>
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<tr>
<td>Business Administration</td>
<td>634 McMechen Hall</td>
<td>(443) 885-3285</td>
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<td>Business Education</td>
<td>316 Jenkins Building</td>
<td>(443) 885-3442</td>
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<td>Business &amp; Management</td>
<td>635 McMechen Hall</td>
<td>(443) 885-3160</td>
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<td>Chemistry</td>
<td>318 Spencer Hall</td>
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<td>Christian Center</td>
<td>4307 Hillen Road</td>
<td>(410) 254-7166</td>
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<td>Civil Engineering</td>
<td>100 Mitchell Engineering Building</td>
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<td>Communication Media</td>
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<td>304 Callowav Hall</td>
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<td>English Lab</td>
<td>G-02 Holmes Hall</td>
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<td>G-03 Holmes Hall</td>
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<td>Graduate/Cartography</td>
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<td>Equal Opportunity Office</td>
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<td>Financial Aid</td>
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<td>(443) 885-3170</td>
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<td>Foreign Languages</td>
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<td>Fulbright Program</td>
<td>102 Montebello Complex</td>
<td>(443) 885-3097</td>
</tr>
<tr>
<td>General Counsel</td>
<td>409 Truth Hall</td>
<td>(443) 885-3220</td>
</tr>
<tr>
<td>Graduate Studies</td>
<td>310 McKeldin Center</td>
<td>(443) 885-3185</td>
</tr>
</tbody>
</table>
Inst. Arch. & Planning 108 Montebello Complex (443) 885-3225
Institute for Transportation 343 Schaefer Engineering (443) 885-3348
Inst. For Urban Research 216 Montebello Complex (443) 885-3004
Inst. Advancement 222 Truth Hall (443) 885-3535
International Students 326 Carter-Grant-Wilson (443) 885-3078
Library Soper Library (443) 885-3477
Circulation Dept. Room 110 (443) 885-3477
Computer Lab Room G-34A (443) 885-3849
Government Documents Room G-26 (443) 885-3642
Micro Media Room Room G-35 (443) 885-3834
Reference Dept. Room 117 (443) 885-3450
Davis Room/Special Coil. Room G-47 (443) 885-3458
Loan Department 226 Montebello Complex (443) 885-3637
Mathematics 152 Carnegie Hall (443) 885-3965
McKeldin Center 310 McKeldin Center (443) 885-3120
Montebello Front Desk (443) 885-3824
Music Department 159 Murphy Fine Arts Center (443) 885-3286
Nat'l. Direct Student Loan 122-A Montebello Complex (443) 885-3010
Nat'l. Transportation Ctr. 211 Montebello Complex (443) 885-3666
Payroll 210 Montebello Complex (443) 885-3026
Philosophy & Religious Stud. 309 Holmes Hall (443) 885-3245
Physics 622 Calloway Hall (443) 885-3226
Planning & Evaluation 105 Carter-Grant-Wilson (443) 885-3372
Police & Public Safe~ 319 Washington Service Center (443) 885-3100
Base Station 316 Washington Service Center (443) 885 3103
Political Science GOS Holmes Hall (443) 885-3277
Post Office LL-C-07 Montebello Complex (443) 885-3234
President's Office 403 Truth Hall (443)885-3200
Psychology 408 Jenkins Building (443) 885-3290
Public Health 325 Jenkins Building (443) 885-3238
Records & Registration 112 Montebello Complex (443) 885-3300
School of Computer, 217 Calloway Hall (443) 885-4515
Math. & Natural Sciences Social Work 422 Jenkins Building (443) 885-3537
Sociology/Anthropology 439 Jenkins Building (443) 885-3518
Speech Communication 204 Banneker Hall (443) 885-3330
Student Affairs 215 Truth Hall (443) 885-3528
Student Government Assoc. Student Center (443) 885-3454
Teacher Education 306 Jenkins Building (443) 885-3409
Tele-Communication Syc. LL-07-C Montebello Complex (443) 885-3900
Transportation Studies 206 Montebello Complex (443) 885-3348
University Print Shop LL Montebello Complex (443) 885-3063
Veteran's Affairs 117 Montebello Complex (443) 885-3300
WEAA-FM 401 Banneker Hall (443) 885-3564
Work Study 222 Montebello Complex (443) 885-3141
APPENDICES

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APPENDIX B:
POLICY ON THE DISCLOSURE OF STUDENT RECORDS

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APPENDIX A:
EQUAL OPPORTUNITY STATEMENT

Morgan State University is committed to maintaining a working and learning environment in which students, faculty and staff can develop intellectually, personally, and socially. Specifically, Morgan State University reaffirms that it shall provide educational programs, services, and employment without regard to race, color, religion, national origin, age, sex, or disability.

Morgan State University welcomes applicants with determination to use the higher education environment for self-improvement, with a desire for sound education and with interest in contributing to improvements in their community. Equal opportunity of access to participate in all educational programs, services, and facilities shall be offered in a nondiscriminatory manner. Equal opportunity for employment will be available for applicants, faculty, staff and support positions. Additionally, all personnel programs (e.g. recruitment, compensation, benefits, transfers, opportunities for advancement, and training programs) will be provided without regard to race, sex, age, national origin, or disability.

It is the policy of Morgan State University not to discriminate on the basis of race, color, religion, national origin, or sex. This policy will continue to apply to all programs and activities of the University, including student admissions, educational programs, non-educational activities, employment and other related activities.

The University is required by Federal regulations to collect admissions and enrollment information by racial, ethnic and gender categories. The use of this information is for reporting purposes only, and is not used to determine eligibility for admission. The provision of this information is voluntary.
APPENDIX B:
POLICY ON THE DISCLOSURE OF STUDENT RECORDS

FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT (FERPA)
The Family Educational Rights and Privacy Act of 1974 (FERPA), also known as the Buckley Amendment, gives students the right to: (1) inspect and review their educational records; (2) consent to release educational records to a third party; (3) challenge information included in the educational records; and, (4) be notified of their rights under FERPA. It is the policy of Morgan State University to comply with the terms and conditions of FERPA.

I. INSPECTION AND REVIEW OF EDUCATIONAL RECORDS
FERPA requires that a college or university have procedures for allowing students to inspect and review their educational records. With certain important exceptions, the term "educational records" means any record (in handwriting, print, tapes, film, computer, or other medium) directly related to a student and maintained by the University. Among the information that may be compiled on a student but is not defined as an educational record under FERPA are: personal records kept by faculty members and/or University officials for their own use; records made by a physician, psychiatrist, psychologist, or other recognized professional or paraprofessional used in connection with the treatment of the student; the records compiled and maintained by campus security for the purpose of law enforcement; certain employment records; and certain alumni records. Students do not have the right to inspect and review: the financial statement of the student’s parents; letters of recommendation for which the student waived his or her right of access; records maintained before January 1, 1975; records related to an application to the University where the applicant was denied admission; and/or any other information excluded from FERPA's definition of educational record.

Students may inspect and review their educational records upon written request to the Registrar in the Office of Records and Registration. The Registrar will direct the written request to the appropriate records custodian and within a reasonable period of time, but in no case longer than 45 days, the appropriate records custodian will provide the student with an opportunity to inspect and review the requested records, so long as the requested records are covered by and are not exempted under FERPA. The University may charge a fee for copying and is under no obligation to certify every record requested by or copied for a student.

II. CONSENT TO RELEASE RECORDS
Morgan State University will disclose information from a student’s educational records only with the written consent of the student. Except that a student’s educational record may, even in the absence of the student’s expressed written consent, be disclosed to: parents of students who are “dependent” as defined by the Internal Revenue Code; to court or law enforcement officials in compliance with a judicial order or lawfully issued subpoena; to accrediting organizations; to appropriate parties in a health or safety emergency; to officials conducting studies for the University; federal, state, and local educational authorities who audit or regulate educational programs; officials of another school in which a student seeks to enroll; and University officials including faculty, administrators, staff, trustees, members of the University judicial bodies, including students, who have a "legitimate educational interest" in the record. A University official has a legitimate educational interest if such official is: performing a task specified in his or her position at the University; performing a task related to the student's education; performing a task related to the discipline of a student; performing a service or benefit relating to the student or the student's family; or the official is maintaining the safety and security of the campus. The University may also disclose the results of any disciplinary proceeding against an alleged perpetrator of a violent crime to the alleged victim of that crime.

Finally, the University may disclose without a student’s consent certain “directory information” such as student’s name, photograph, parent’s name, address, telephone number, date and place of birth, major field of study, dates of attendance, degrees and/or awards received, participation in officially recognized activities, height and weight of members of athletic teams, and most recent educational institution attended. A student who objects to the disclosure of “directory information” must provide annual written notice to the Registrar in the Office of Records and Registration within three weeks of the first day of Fall semester classes not to disclose any or all of the categories of directory information related to that student.

There may be circumstances where students will want to grant an individual or organization access to their records. Frequent examples include, employers, employment agencies, counselors, attorneys, and honorific societies. Requests for disclosure of educational records should be made in writing to the Registrar in the Office of Records and Registration. Within a reasonable period
of time, but in no case longer than 45 days, the appropriate University official will disclose to the individual or organization identified by the student as having permission to review the requested records, so long as the requested records are covered and are not exempted under FERPA. The University may charge a fee for copying and is under no obligation to certify every record disclosed at the request of or on behalf of a student.

III. CORRECT INFORMATION IN THE RECORD

With the exception of grades, an instructor's procedure or judgment in awarding grades, students have the right to ask to have educational records corrected that they believe are inaccurate, misleading, or otherwise in violation of their privacy rights. Students at the University who wish to challenge information in their educational record that they believe is inaccurate, misleading, or in violation of their privacy rights must submit a written request to the Registrar in the Office of Records and Registration. The Registrar will direct the request to the University official responsible for the record in question. After reviewing the request within a reasonable period of time, the University will communicate to the student in writing a decision about whether the University will amend the record.

If the decision of the University is not to amend the record a student has the right to appeal by writing to the Vice President for Academic Affairs (VPAA), requesting a hearing on the matter. The VPAA will notify the student in writing of the time, place, and date of the hearing. The hearing officer will be a University official appointed by the VPAA. The student shall have a full and fair opportunity to present evidence related to the matter and/or educational record in question. Within a reasonable period of time following the hearing, the student will be notified in writing of the University's decision. If the University finds, as a result of evidence presented at the hearing, that the educational record contains inaccurate, misleading information or that the record as presently constituted violates the privacy rights of the student, the University will amend the record. On the other hand, if the University decides after its review of the evidence presented at the hearing that the information in the student's record is not inaccurate, misleading, or in violation of privacy rights, the student has a right to include in his or her record a statement commenting on the challenged information and/or a statement setting forth reasons for disagreeing with the decision. The student's statement will be maintained as part of the educational record and shall be disclosed whenever the University discloses the contested portion of the record.

IV. NOTICE OF PRIVACY RIGHTS

The preceding review of rights and procedures is meant to inform students of the rights accorded to them by the Family Educational Rights and Privacy Act. Pursuant to §99.7 of the FERPA regulations, students at the University are provided with annual notification of their FERPA rights in the Course Schedule Booklet published each semester. For a full understanding of the terms, conditions, rights, and exceptions found in FERPA, students are encouraged to read the entire act, which is found in 20 United States Code Annotated (USCA) §1232g et.seq. Students who believe that the University has abridged their rights under FERPA may file a written complaint with the Director, Family Policy Compliance Office, U.S. Department of Education, 600 Independence Avenue S.W., Washington, D.C. 20202-4605.
APPENDIX C:  
MSU POLICY FOR STUDENT RESIDENCY CLASSIFICATION FOR ADMISSION, TUITION, & CHARGE-DIFFERENTIAL PURPOSES

I. POLICY
It is the policy of the Board of Regents of Morgan State University to recognize the categories of in-state and out-of-state students for purposes of admission, tuition, and charge differential. The student is responsible for providing the information necessary to establish eligibility for in-state status.

A. Students, who are financially independent or financially dependent, as hereinafter defined, shall have their residency classification determined on the basis of permanent residency. For purposes of this policy, a permanent residence is a person’s permanent place of abode as determined by the following criteria*. Such students will be assigned in-state status for admission, tuition, and charge differential purposes only if the student (if financially independent) or the student’s parent, guardian or spouse (in the case of a financially dependent student):

• Owns or rents and occupies living quarters in Maryland. There must exist a genuine deed or lease in the individual’s name reflecting payments/rents and terms typical of those in the community at the time executed. Persons not having such a lease may submit an affidavit reflecting payments/rents and terms as well as the name and address of the person to whom payments are made which may be considered as meeting this condition. As an alternative to ownership or rental of living quarters in Maryland, a student may share living quarters in Maryland, which are owned or rented and occupied by a parent, legal guardian, or spouse;

• Maintains within Maryland substantially all personal property;

• Pays Maryland income tax on all earned taxable income including all taxable income earned outside the State;

• Registers all owned motor vehicles in Maryland in accordance with Maryland law;

• Possess a valid Maryland driver’s license, if licensed, in accordance with Maryland law;

• Is registered in Maryland, if registered to vote;

• Receives no public assistance from a state other than the State of Maryland or from a city, county, or municipal agency other than one in Maryland; and

• Has a legal ability under federal and Maryland law to reside permanently without interruption in Maryland.

B. In addition to meeting all of the criteria set forth in the preceding section, to qualify for in-state status on the basis of permanent residence, a student or, if the student is financially dependent, the parent, legal guardian, or spouse, must have resided in Maryland for at least twelve (12) consecutive months immediately prior to and including the last date available for late registration for the forthcoming semester or session and must have continuously resided in Maryland during that period.

C. If a student is financially dependent as hereinafter defined, the permanent residence of the parent, guardian, or spouse on whom the student is dependent shall determine in-state status. If a student is financially independent, the permanent residence of the student shall determine in-state status.

D. In-state status based on permanent residence is lost at any time a financially independent student establishes a permanent residence outside the State of Maryland. If the parent, guardian, or spouse through whom a financially dependent student has attained in-state status establishes a permanent residence outside the State of Maryland, the in-state status is lost. In each instance, the student will then be assessed out-of-state tuition and charges beginning the next semester or session.
E. In addition, the following categories of students shall have in-state status:

- A full-time or part-time (at least 50 percent of the time) permanent employee of Morgan State University;
- The spouse or dependent child of a full-time or part-time (at least 50 of the percent time) permanent employee of Morgan State University;
- A full-time active member of the Armed Forces of the United States whose home of residency is Maryland or one who resides or who is stationed in Maryland; or the spouse or a financially dependent child of such a person; and
- A graduate assistant.

F. Students not entitled to in-state status under the preceding paragraphs shall be assigned out-of-state status for admission, tuition, and charge-differential purposes.

*All eight indicia of permanent residency must be met for the entire 12-month period proceeding the last day of late registration.

II. PROCEDURES

GENERAL GUIDELINES

An initial determination of in-state status for admission, tuition, and charge-differential purposes will be made by the University at the time a student’s application for admission is under consideration. The determination made at that time, and any determination made thereafter, shall prevail for each subsequent semester until the determination is successfully challenged in a timely manner.

A student may request a re-evaluation of his or her residency status by filing an Application for Change in Residency Classification for Admission, Tuition, and Charge-Differential Purposes (hereafter referred to as “Application”).

A student must meet the requirements for in-state status and submit a completed Application (including all documents required therein) by the last day of late registration for the semester the student wishes to establish in-state status (hereinafter referred to as “Deadline”). No change in status requested by the student shall be given retroactive effect prior to the semester for which a student filed a timely Application. A student may file only one Petition per semester.

A determination of in-state status is valid only if the student actually enrolls in the semester for which the student applied. Determinations, which are not made in cases where the student does not actually enroll, are not valid for a subsequent semester.

It is the student’s responsibility to demonstrate to the satisfaction of the University that he or she meets all requirements of this Policy and that an in-state classification is appropriate. The student applying for in-state status must furnish appropriate documentation as required by the University. Within the President’s or the President’s designee, a waiver of a residency requirement may be considered.

In the event that incomplete, inaccurate, false, and/or misleading information is presented, the University may, at its discretion, revoke any subsequent assignment of in-state status. In such case, the student shall be required to pay all cost differentials between in-state and out-of-state status beginning with the semester for which in-state status was obtained. In the event in-state status is assigned as a result of administrative or clerical error, the University may, at its discretion, revoke this assignment. In such case, the student may be required to pay all cost differentials between in-state and out-of-state status beginning with the semester for which in-state status was erroneously assigned.

During the time when requests for reclassification are being considered, fees and charges based on the previous out-of-state determination must be paid. The student is responsible for all payment of any late charges assessed for the unpaid out-of-state differential during that time. If in-state status is granted, the out-of-state differential will be refunded for the semester in which a timely in-state status was filed.

The student shall notify the institution in writing within fifteen (15) days of any change of circumstances, which may affect the student’s in-state status.
APPEALS

To the Vice President of Academic Affairs (VPAA) or VPAA's designee of-A student who has been denied in-state reclassification following the submission of an Application may request a personal interview with the VPAA (or the VPAA's designee) in order to present any and all evidence relevant to the student's residency classification, and to answer questions which may have been raised about the student's status. Such request must be in writing and must be received by the University no later than fifteen (15) working days from the date, which appears on the University's written denial of the Application.

To the President or the President's designee—If the decision of the VPAA is adverse to the student, a written appeal may be filed with the President or President's designee. Such written appeal must be received by the President or designee no later than fifteen (15) working days from the date of the written adverse decision of the VPAA, and should present any information upon which the appeal is based and of which the student would like the President or designee to be aware. The President or designee, who shall reach a decision in the case, shall consider the written appeal. Unless otherwise specifically requested by the President or designee, information and arguments not presented by the student to the President or his designee shall not thereafter be considered on appeal. It is the student's responsibility to provide complete and timely responses to requests for information by the University. Failure to do so may result in a denial of the appeal.

III. DEFINITIONS

A. FINANCIALLY DEPENDENT:
For purposes of this policy, a financially dependent student is one who is claimed as a dependent for tax purposes, or who received more than one-half of his or her other support from a parent, legal guardian, or spouse during the twelve (12) month period immediately prior to the last available date for late registration for the semester or session. If the student receives more than one-half of his or her support in the aggregate from a parent and/or legal guardian and/or spouse, the student shall be considered financially dependent on the person providing the greater amount of support.

B. FINANCIALLY INDEPENDENT:
A financially independent student is one who:
declares himself to be financially independent as defined herein;
does not appear as a dependent on the Federal or State income tax return of any other person;
receives less than one-half of his or her support from any other person or persons; and,
demonstrates that he or she provides through self-support one-half or more of his or her total expenses.

C. PARENT:
A parent may be a natural parent, or, if established by a court order recognized under the law of the State of Maryland, an adoptive parent.

D. GUARDIAN:
A guardian is a person so appointed by a court order recognized under the law of the State of Maryland.

E. SPOUSE:
A spouse is a partner in a legally contracted marriage.

F. SUPPORT:
Except as set forth in point 2 below, support shall mean financial or material support, including gifts, services and trusts, and income or benefits derived from one's family. Support shall not include grants, stipends, awards, and benefits (including Federal and State student aid, grants, and loans) received for the purpose of education or by virtue of an individual's status or prospective status as a student. Such resources shall not be considered in calculating a student's financial dependence or independence.
APPENDIX D:

CAMPUS SECURITY STATEMENT

STATEMENT OF CURRENT POLICIES CONCERNING SECURITY AND ACCESS TO CAMPUS FACILITIES, INCLUDING RESIDENTIAL HALLS, AND SECURITY CONSIDERATIONS USED IN THE MAINTENANCE OF CAMPUS FACILITIES:

Morgan State University is designated as Maryland’s public urban university. As such, the University is situated on an open campus in the northeastern portion of Baltimore City. The University comprises approximately 157 acres and is impacted on its boundaries by surrounding residential communities and retail activities. The overall security program of the University is focused on providing community oriented policing police protection and security services to a population which includes approximately 6500 students and 1700 faculty members and other employees. Access to campus facilities and activities is accomplished by means of an identification card, which is issued to each member of the community. The MSU Bear Necessary identification card is the primary means of identifying community members on the campus and the display of the card on an outer garment is consistently encouraged and, upon request of an officer of the University, the identification card must be shown. Residential life facilities are staffed by employees of the Office of Residential Life, who assume responsibility for controlling access to on/off campus residential facilities. In addition, continuous exterior security is provided during the hours of darkness by dedicated security officers and regular police patrols and plainclothes officers. The University makes every effort to ensure that campus facilities, buildings, and grounds are designed and maintained in such a manner as to promote safety and security, and reduce the opportunity for criminal activity. In this light, emphasis is focused on protective lighting, landscaping and groundskeeping, and identifying areas of the campus, which may contribute to crime conducive conditions. In addition to this effort, sophisticated security alarm systems are employed in and around buildings throughout the campus, as well as security officers in selected facilities and continuous foot/motorized/bicycle police patrols.

STATEMENT OF CURRENT POLICIES CONCERNING CAMPUS LAW ENFORCEMENT:

The Department of Police and Public Safety is charged with the responsibility for the delivery of security, law and order, and police services at Morgan State University. The Department employs approximately thirty-three (33) sworn police officers along with ten (10) non-sworn support staff. Police officers must successfully complete a minimum standard entry level police training academy course as mandated by the State of Maryland Police & Correctional Training Commissions, which includes such subjects as criminal law and procedures, patrol and investigation practices and techniques, firearms, first-aid, emergency vehicle operations, use of force, and physical training. In addition, police officers must successfully complete in-service training on an annual basis to maintain their certification as police officers in the State of Maryland. Finally, an array of in-service training and specialized training programs are presented to update and enhance the professional skills of the officers.

University police officers are vested with all the powers, authority, and responsibilities of any police officer of the state on property owned or operated by the university. The Department of Police and Public Safety cooperates fully with local and state law enforcement agencies in cases which involve both on-campus and off-campus jurisdictions, or when the resources of another agency can be used to facilitate the resolution of an investigation or public safety issue.

Members of the University community are urged to notify the Department of Police and public Safety immediately of any criminal activity or other public safety concern or issue. In addition, emergency security (no dial) telephones are installed at selected locations throughout the University campus and on passenger elevators.

The Department of Police and Public Safety publishes news articles and news bulletins, and provides oral presentations to all segments of the campus community on a frequent basis to educate community members on police policies and procedures. Students and employees are reminded of recurring or significant crime problems being experienced on the campus and their role and responsibility in reducing their vulnerability in becoming crime victims.

The Department of Police and Public Safety publishes pamphlets on various topics of Crime Prevention which are available to all students, faculty and staff members. Topics include: Police Protection and Security Services, General Crime Prevention Techniques, Campus Watch, Operation I.D., Rape and Sexual Assault, Date Rape, and Drug and Alcohol Abuse. The Department of Police and Public Safety holds sessions each semester on the above topics. Information on safety and security is provided to students, faculty, and staff members regularly through seminars, films, bulletins, crime alerts, posters, brochures and university staff and student newspapers, Jeanne Clery Disclosure of Campus Security Policy & Campus Crimes Statistics Act and other university periodicals.
Moreover, it should be noted that specific criminal statistics information pertaining to crime within this campus community is available to all prospective students and employees as well as current students and work force personnel. Requests for such information should be directed to Police Headquarters either in person or via telephone (443-885-3169) or via correspondence to the following address:

Police and Public Safety Department
Morgan State University
1700 East Cold Spring Lane
Baltimore Maryland 21251.
APPENDIX E:
SEXUAL HARASSMENT POLICY
POLICY PROHIBITING SEXUAL HARASSMENT
AND PROCEDURES FOR COMPLAINTS OF SEXUAL HARASSMENT

I. STATEMENT OF POLICY
Sexual harassment by University employees, faculty, staff, and students is illegal conduct and will not be tolerated in the Morgan State University community. Morgan State University is committed to maintaining a working and learning environment in which students, faculty, and staff can develop intellectually, professionally, personally, and socially. Such an environment must be free of intimidation, fear, coercion, and reprisal. The University prohibits sexual harassment. Sexual harassment subverts the mission of the University and threatens the well being, educational experiences, and careers of students, faculty and staff.

This Statement of Policy constitutes University policy. Sexual harassment violates University policy and may violate the criminal and civil laws of the State of Maryland and the United States.

II. DEFINITION OF SEXUAL HARASSMENT
For the purpose of this University policy, the University adopts the definition of sexual harassment promulgated by the Equal Employment Opportunity Commission. Sexual harassment is defined as: (1) unwelcome sexual advances; or (2) unwelcome requests for sexual favors; and (3) other behavior of a sexual nature where:

A. Submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment or participation in a University-sponsored educational program or activity; or

B. Submission to or rejection of such conduct by an individual is used as the basis for academic or employment decisions affecting that individual; or

C. Such conduct has the purpose or effect of unreasonably interfering with an individual's academic or work performance, or of creating an intimidating, hostile, or offensive educational or working environment. Sexual harassment may occur between persons of the same or different genders.

Examples of sexual harassment, as defined above, may include but are not limited to the following behavior directed at a person because of his or her gender:

• Direct or implied threats that submission to sexual advances as a condition of employment, work status, promotion, grades, or letters of recommendation;
• Unwelcome physical contact, including unnecessary touching, patting, hugging or brushing against a person's body;
• Pervasive and or unwelcome sexual comments, jokes or conversations.

In assessing whether a particular act constitutes sexual harassment as defined by this policy, the standard shall be the perspective of a reasonable person within the University community. In determining whether alleged conduct constitutes sexual harassment, the University will look at the record as a whole and at the totality of the circumstances such as the nature of the sexual advances and the context in which the alleged incidents occurred. The determination of the legality of a particular action will be based on the findings of fact, on a case-by-case basis. The rules of common sense and reason shall prevail.

III. INFORMAL RESOLUTION
In certain cases, where the nature of an alleged incident may not be so serious that the University must intervene in a formal way and the Complainant indicates that she or he does not want to pursue a formal complaint but simply wants the harassment to stop, informal resolution may be the preferred way to handle a complaint. However, informal resolution must always be voluntarily agreed to in writing by the Complainant with no requirement that the Complainant use informal procedures before filing a formal charge. The individual is free to withdraw from informal procedures altogether and file formally within the institution.

The University will always investigate a matter even when the Complainant refuses to file a formal complaint. However, when the University and Complainant agree to handle the matter informally, a formal investigation will not ensue as provided-for in section IV of this policy.

The informal manner in which an incident is handled will depend upon the severity of the incident and the wishes of the Com-
plaintant. Possible alternatives include but are not limited to: the Complainant telling the alleged offender the behavior is unwelcome and must stop; the Complainant mailing or placing a copy of the sexual harassment policy in the alleged offender’s mailbox after circling the applicable portion of the policy; the Complainant sending a letter to the alleged offender, giving a factual account of what happened, describing the writer’s feelings about what happened, describing what the writer wants to happen next (e.g., “I want your behavior to stop.”), and delivery of the letter by certified mail.

IV. PROCEDURES FOR FILING FORMAL COMPLAINTS OF SEXUAL HARASSMENT

A. Formal Complaints of Sexual Harassment

1. A formal complaint occurs when: (a) a person who believes that he/she has been the victim of sexual harassment in the University community; or (b) a University employee with knowledge of the allegations, notifies the University’s Equal Opportunity Officer, General Counsel or Director of Human Resources of the allegations. If either General Counsel or Director of Human Resources receives notification, they shall promptly refer the notice to the Equal Opportunity Officer (or such person designated by the President). The person who complains, who is referred to as the “Complainant”, may be a University employee, student, staff member, or faculty member. The Complainant will be interviewed by the Equal Opportunity Officer or such other person designated by the President and asked to provide a written statement of his/her complaint but is not required to do so.

2. THERE IS NO SUCH THING AS AN “UNOFFICIAL” COMPLAINT OF SEXUAL HARASSMENT. ONCE THE UNIVERSITY’S EQUAL OPPORTUNITY OFFICER, GENERAL COUNSEL OR DIRECTOR OF HUMAN RESOURCES LEARNS OF A SEXUAL HARASSMENT COMPLAINT, WRITTEN OR ORAL, THE UNIVERSITY IS REQUIRED TO INVESTIGATE THE MATTER UNLESS THE UNIVERSITY AND THE COMPLAINANT AGREE TO PURSUE THE MATTER INFORMALLY.

3. The University shall have no obligation to investigate complaints received more than 12 months after the date on which the alleged harassing conduct is alleged to have occurred unless it chooses to do so.

B. Reporting a Complaint

Any University employee who obtains knowledge of an incident of sexual harassment occurring within the University is required to notify the Equal Opportunity Officer, General Counsel or the Director of Human Resources whether or not the Complainant indicates that they do not want anyone to do anything about the harassment. University employees failing to report incidents of sexual harassment may be subject to disciplinary action. Once notified, the Equal Opportunity Officer or the Director of Human Resources shall promptly notify, in writing, the University’s General Counsel (or such other person designated by the President) of the receipt of a sexual harassment complaint. If the complaint is received by the General Counsel the General Counsel shall promptly notify the Equal Opportunity Officer, in writing.

C. Notice of Charge to the Person Accused of Sexual Harassment

Upon receiving a complaint, the Equal Opportunity Officer or such other person designated by the President shall notify the person(s) accused of sexual harassment. The written notice of charge will inform the person accused of sexual harassment that a complaint has been filed, the name of the Complainant, and a general statement of the nature of the complaint. It will also advise the Accused that the Accused will be provided with detailed information during the interview regarding the allegations and have an opportunity to respond to each allegation in an interview to be scheduled by the Equal Opportunity Officer, or such other person designated by the President.

D. Investigation and Report on Investigation

The Equal Opportunity Officer or such other person designated by the President shall promptly conduct an investigation which must include but is not limited to an interview of the Complainant, person accused of sexual harassment, witness(es) and a review of documentation. University employees, including the Accused, refusing to cooperate with the internal investigation shall be subject to disciplinary action, ranging from reprimand to termination.

E. Findings of Fact and Recommendations for Action

The written findings of fact derived from the investigation and recommendations for action by the Equal Opportunity Officer or such other person designated by the President shall be confidentially reported to the President (or the President’s designee). The written findings of fact shall also be confidentially reported to the relevant vice president, dean, chairperson or supervisor as determined by the Equal Opportunity Officer upon prior consultation with the General Counsel. Recommended sanctions for employees accused of sexual harassment include, but are not limited to, reprimand and termination. Recommended sanctions for students accused of sexual harassment include, but are not limited to, suspension and expulsion.

The Equal Opportunity Officer may advise the Complainant and the Accused of the result of the investigation (that is, whether harassment has been confirmed). Neither the Complainant nor the alleged harasser are entitled to receive a copy of the findings of
fact and recommendations for action; except where disciplinary action is involved, the accused shall be provided with notice of the findings of fact which resulted in the recommendation for disciplinary action. Upon written request, however, both parties may receive a summary of the findings of fact.

In instances where the Equal Opportunity Officer’s findings of fact sustain any of the Complainant’s allegations and a recommendation for disciplinary action is made, the procedure employed to proceed with disciplinary action shall depend upon the employment category of the Accused and the policies and procedures governing an employee within that employment category. Examples of procedures include, but are not limited to:

- A recommendation for termination of a tenured or tenure track faculty member which may be handled in accordance with the faculty termination policy;
- A recommendation of disciplinary action less than termination of a tenured or tenure track faculty member which may be referred to the applicable Dean or the Vice President for Academic Affairs for action which the Accused may appeal (to the Vice President for Academic Affairs when action is taken by the Dean and to the Executive Assistant to the President when the action is taken by the Vice President for Academic Affairs) within five (5) working days after receiving notice of the disciplinary action. Failure of the Accused to appeal within five (5) working days shall result in imposition of the prescribed disciplinary action;
- A recommendation for termination of a classified employee may be handled in accordance with State law and the classified employees policies and procedure manual;
- A recommendation for disciplinary action against a student may be handled in accordance with the Code of Student Conduct;
- Recommendations for action based upon a finding of sexual harassment committed against a member of the University community (employee or student) by a person external to the University (an independent contractor, a vendor, a third party) will depend upon the circumstances of each case and may include, but are not limited to, termination of a contractor’s contract with the University; referral to officials of the criminal justice system; and advisement of trespass from the University.

V. CONFIDENTIALITY
Sexual harassment is a matter of grave concern for both the Complainant and the Accused. Therefore, information gathered during the investigation of sexual harassment complaints will be handled discreetly and with the utmost sensitivity and care. Notwithstanding the above, in the course of any investigation, the release of some information is necessary in order to gather relevant information.

VI. OTHER RESOURCES
Persons who feel they are the victims of sexual harassment may pursue the matter with an external organization which may include but is not limited to: the Maryland Commission on Human Relations and/or the Equal Employment Opportunity Commission. In addition, the circumstances of the case may warrant the consideration of the filing of a complaint pursuant to the Code of Student Conduct and the Classified Employee’s grievance procedures. Other civil and criminal causes of action may be available to the Complainant.

VII. RETALIATION
Any member of the University community who attempts to interfere, restrain, coerce, discriminate against, or harass any individual for participation in the procedures set forth in this policy will be subject to disciplinary action including but not limited to: for employees-termination, suspension, or formal reprimand; and for students-suspension or expulsion.

VIII. FALSE AND MALICIOUS CHARGES
The use of this policy for false or malicious purposes is strictly prohibited. Any student, faculty member, or staff member who exercises bad faith and brings a false or malicious charge of sexual harassment against another member of the University community may be subject to disciplinary action including but not limited to: for employees-termination, suspension, or formal reprimand; and for students suspension or expulsion.

IX. EDUCATIONAL PROGRAMS
Educational efforts are essential to the establishment of a campus environment that is as free as possible of sexual harassment. There are at least four goals to be achieved through education: ensuring that all victims (and potential victims) are aware of their rights; notifying individuals of conduct that is proscribed; informing administrators about the proper way to address complaints of violations of this policy, and helping educate the insensitive about the problems this policy addresses. Copies of this policy shall be made available to all members of the campus community. Training sessions shall be made available to all interested faculty, staff and students at the University.

X. EFFECTIVE DATE
The effective date of this policy shall be February 15, 2000. This policy shall govern the treatment of complaints of sexual harassment received by the Equal Opportunity Officer, the General Counsel or the Director of Human Resources after that date.
APPENDIX F:

POLICY ON SEXUAL ASSAULT

PURPOSE
Morgan State University asserts that sexual assault represents a reprehensible act in violation of basic human rights which will not be tolerated. This policy affirms the University’s responsibility to establish a policy prohibiting sexual assault which contains procedures to be followed when sexual offenses occur at the University. This policy is consistent with and responsive to Section 485(f) of the Higher Education Act of 1965, as amended by Section 486 (c)(2) of the Higher Education Amendments of 1992 and Section 11-601 of the Education Article of the Annotated Code of Maryland. This policy applies to all employees (faculty and non-faculty), and students of Morgan State University.

DEFINITIONS
“Sexual Assault” is defined as any form of sexual contact with another person without his or her consent. For the purposes of this policy, sexual assault and sexual offense are synonymous.

PROCEDURES AND PROGRAMS
The President or his designee shall develop procedures for reporting sexual assaults and programs to promote sexual assault awareness. The procedures and programs shall be set forth in writing and made available to the campus community. That document, as amended periodically to reflect amendments to the procedures and/or programs, is incorporated herein by reference.

EDUCATIONAL PROGRAMS TO PROMOTE AWARENESS OF SEXUAL ASSAULT
The University shall make available to its students, faculty and employees programs to promote awareness of what constitutes sexual assault, how to prevent it, and the University’s procedures for handling reports of alleged sexual assault. In addition to general educational programs for the campus community, the University shall provide specialized training on the topic of sexual assault and the provisions of sexual assault procedures to individuals who may be involved in providing services to or interacting with alleged victims so as to ensure timely, accurate and sensitive assistance to all students, faculty and employees and shall be posted in appropriate locations on campus and published in appropriate University publications.

PROCEDURES FOR REPORTING A SEXUAL ASSAULT
When a report of sexual assault is made to the University Police Department, the alleged victim will be encouraged to file criminal charges with the appropriate law enforcement and/or medical personnel as soon as possible. At the request of the alleged victim, University authorities will promptly assist the alleged victim in notifying the appropriate law enforcement officials and disciplinary authorities. University personnel will also assist the alleged victim with obtaining medical attention, if desired, including providing the alleged victim with transportation to the hospital or other emergency medical facility.

DISCIPLINARY PROCEDURES
Student Disciplinary Procedures
Violations of laws and University policy regarding sexual assault may be subject to prosecution through the criminal justice system and civil authorities, and the campus judicial system. The range of University penalties shall include, but not be limited to, one or more of the following: alteration of class schedule, disciplinary reprimand, removal from campus housing, loss of privilege, restitution, disciplinary dismissal, and disciplinary expulsion.

The on-campus procedures shall provide that (1) the accuser and the accused are afforded the same opportunities to have others present during a campus disciplinary proceeding, (2) both the accuser and the accused are informed of the outcome of any campus disciplinary proceeding brought alleging a sexual assault, (3) the accuser and the accused will be treated with dignity, courtesy and professionalism, and (4) that while the offense must be reported according to federal reporting mandates and Maryland State law, the victim’s right to choose the course of action to be taken or not to be taken is upheld.

Faculty and Employee Disciplinary Procedures
No disciplinary actions will be rendered until a thorough investigation of the alleged offense has been completed. However, the President may place the accused faculty member or employee on administrative leave pending the outcome of the investigation.

Violations of laws and University policy regarding sexual assault may be subject to prosecution through both criminal and civil authorities, and the appropriate faculty or employee disciplinary procedure. The range of University penalties shall include, but not be limited to, one or more of the following: counseling, reprimand, suspension, or termination.
Faculty and employees accused of sexual assault are entitled to avail themselves of the appropriate grievance process for their category of employment. The University procedures shall provide that (1) both the accuser and the accused are informed of the disposition of the sexual assault complaint, (2) the accuser and the accused will be treated with dignity, courtesy, and professionalism, and (3) that while the offense must be reported according to federal reporting mandate and Maryland State law, the victim’s right to choose the course of action to be taken or not to be taken is upheld.

SERVICES FOR VICTIMS
Faculty, employees and students who are victims of sexual assault will be offered access to counseling through mental health services available at the institution, other victim service entities in the surrounding community, or the nearest state designated rape crisis program.

Upon the request of the alleged sexual assault victim, the University will provide information regarding options for, and available assistance in changing academic and on-campus housing after an alleged sexual assault incident, if such changes are reasonably available and feasible.

PROCEDURES AND PROGRAMS RELATED TO SEXUAL ASSAULT

INTRODUCTION
Morgan State University is committed to educating its faculty, staff, and students about the nature and consequences of sexual assault. Although the University’s primary focus is on prevention, the University has established programs to provide information about sexual assault, to make referrals to the criminal justice system and/or campus disciplinary systems and to assist persons who have been sexually assaulted on campus.

PROCEDURES FOR REPORTING SEXUAL OFFENSES

UNIVERSITY POLICE DEPARTMENT
Any person who is sexually assaulted on campus should contact the University Police Department immediately. The University Police Department shall advise the person of their option to file criminal charges with the appropriate law enforcement officials. The University Police Department shall also provide assistance in obtaining appropriate medical attention, including transportation to the nearest designated hospital. The Sexual Assault Center at Mercy Hospital, located on St Paul Street, Baltimore, Maryland, is the nearest State-designated rape crisis center and is equipped with the Maryland State Police Sexual Assault evidence collection kit.

IF A SEXUAL ASSAULT OCCURS
A medical examination is always recommended even if the sexual assault victim decides not to officially report the crime. Medical care is important to assess physical trauma, to diagnose sexually transmitted disease and to provide emergency contraception. Ideally, evidence should be collected immediately in case a decision is made to pursue criminal and/or administrative sanctions. Specifically, sexual assault survivors should do everything possible to preserve the evidence of the assault. In this regard, they should:

• immediately seek medical attention
• refrain from bathing, showering, or douching
• avoid disturbing any clothing, bed linens, and/or anything around the vicinity of the assault avoid brushing teeth, eating, drinking or smoking if the assault involved oral/genital contact
• try not to urinate take a change of clothing with them; as it may be necessary to retain clothing worn during an assault.
• If the survivor changes clothes, they should be placed in a paper bag (plastic destroys evidence)

IF YOU DECIDE TO REPORT
Sexual assaults, including date/acquaintance rape, are a very serious concern. If you feel you are the victim of a sexual assault on campus, your Department of Police and Public Safety strives to adhere to the following guidelines:

We will meet with you privately, at a place of your choice in this area, to take a complaint report. You may choose to have a friend or family member with you while speaking with the officer.
We will not release your name to the public or the press. Your identity will be protected by the Police.
Our officers will not prejudge you, and you will not be blamed for what occurred.
We will treat you and your particular case with sensitivity, dignity, understanding, and professionalism.
If you feel more comfortable talking with a female or male officer, we will do our best to accommodate your request. We will assist you in arranging for any hospital treatment or other medical needs. We will assist you in privately contacting counseling, safety, advising, and other available resources. We will fully investigate your case, and will help you achieve the best outcome. This may involve the arrest and full prosecution of the suspect responsible. You will be kept up-to-date on the progress of the investigation and/or prosecution. We will continue to be available for you, to answer your questions, to explain the systems and processes involved (prosecutor, courts, etc.), and to be a listening ear if you wish. We will consider your case serious regardless of your gender or the gender of the suspect.

If you feel you are a sexual assault victim, call your Department of Police and Public Safety at (443) 885-3179, and say you want to privately make a sexual assault complaint. You may call at any time of day or night. You are encouraged to report any sexual assault, including acquaintance rape to the University Police, taking care to preserve all evidence that may be relevant. Your safety and well-being are of great concern to the University Police. The University police will normally conduct a criminal investigation and report the findings to the State’s Attorney’s Office.

The Office of Residence Life
An incident of sexual assault which occurs in a residence hall which is reported to the staff of the Office of Residence Life shall be reported to the Residence Life Director of that residence hall. The Residence Life Director shall interview the reported victim of the assault and notify the alleged victim of his or her option to notify proper law enforcement authorities, including on-campus and local police, and the option to be assisted by campus authorities in notifying such authorities, if the student chooses. The reported victim of the assault is encouraged to seek medical care and counseling.

COUNSELING AND SUPPORT SERVICES
The Counseling Center, staffed by professional counselors, offers individual counseling and support group counseling to sexual assault survivors. In addition, a counselor has been trained by the Sexual Assault Recovery Center to provide counseling and develop education and prevention programs. Further, referrals are made to other mental health services, for example, the Sexual Assault Recovery Center. The Counseling Center can be reached on (443) 885-3130/3131.

EDUCATION PROGRAMS TO PROMOTE SEXUAL ASSAULT AWARENESS
The Counseling Center
The University Counseling Center offers several educational programs to the campus community to promote the awareness of rape (including acquaintance rape) and of other sex offenses.

The Counseling Center offers counseling, mental health, and other services for victims of sexual assault. For example, both individual counseling and support groups are available for sexual assault survivors. In addition, a counselor has been trained by the Sexual Assault Recovery Center to provide counseling and develop education and prevention programs relating to sexual assault and acquaintance rape.

Upperclassmen perform a skit during the summer Introduction to The University Week Program, for new students, that depict a male and female socializing and ends in a sexual assault. Audience participation and discussion follow with additional information about available resources on campus.

The Counseling Center also does a date rape presentation, “No Means No”, for males only in the residence hall.

Each semester counselors conduct seminars and group discussions on Sexual Awareness, Sexual Assault, and Date Rape.

The Rape Aggression Defense System is a program of realistic, self-defense tactics and techniques. It is a comprehensive course for the average individual that begins with awareness, prevention, risk reduction and avoidance, while progressing on to the basics of hands-on-defense training. The Rape Aggression Defense System is sponsored by the Counseling Center and the Campus Police.

The Police Department
The Department of Police and Public Safety publishes pamphlets on various topics of Crime Prevention which are available to all students, faculty, and staff members.
Topics include: Police Protection and Security Services, General Crime Prevention Techniques, Campus Watch, Operation I.D., Rape and Sexual Assault, Date Rape, and Drug and Alcohol Abuse. The Department conducts sessions each semester on the above topics. Information on safety and security is provided to students, faculty, and staff members regularly through seminars, films, bulletins, crime alerts, posters, brochures, and University staff and student newspapers. Other education and prevention programs include the following:

Implementation of the Help Improve Morgan’s Image (HIMI) program within the campus community. This program involves the active support and cooperation of students, student groups and work force personnel in collectively working to improve the image of the university by discouraging littering, drug and alcohol abuse and other unacceptable behavior patterns.

Initiation of a university-wide crime prevention council. Meeting on a regular basis, the council, comprised of various student, faculty and staff representatives, discusses crime trends and public safety issues and seeks to develop strategies to reduce crime on campus.

The department, in conjunction with the University Counseling Center, provides training in Rape Aggression Defense (RAD) to female members of the campus. The RAD program introduces female students and employees to various techniques than can be employed in reducing one’s vulnerability to hostile encounters.

A network of “hot line” emergency call boxes/telephones across campus and in elevators that ring on the desk of the police dispatcher when assistance is required.

The Office of Residence Life
The Office of Residence Life is committed to educating residents of the residence halls regarding sexual awareness issues, including sexual assault, date rape, etc. The Office of Residence Life offers programs and lectures to raise the awareness of student residents on sexual issues. The programs offer resources for consultation, support groups, victim assistance, etc.

The Office of Resident Life has established a library of materials regarding issues associated with human sexuality.

Sanctions and Disciplinary Actions

Student Discipline

The University Code of Conduct and Disciplinary Procedures (“Code of Conduct”) prohibits rape, acquaintance rape, or any form of sexual assault or sex offense. Persons incapacitated by drugs or alcohol are not capable of giving consent to a sexual contact. University disciplinary procedures are set forth in the Code of Conduct. Persons charged with a violation of the Code of Conduct are subject to disciplinary action if the charges are sustained. Such actions may include but are not limited to suspension or expulsion from the University.

Reported student victims of sexual assault are encouraged to contact the Office of the Vice President for Student Affairs. That office will advise the student regarding the services available which may be of assistance. For example, upon the written request for alternative classes or housing by the alleged victim, the Office of the Vice President for Student Affairs will coordinate the review of the request. With regard to class changes, the Office of Student Affairs will refer the matter to the Office of the Vice President for Academic Affairs. If available, feasible, and warranted by the circumstances associated with the alleged sexual assault, alternative class and housing requests will be honored.
APPENDIX G:
INCLEMENT WEATHER POLICY

In the event of inclement weather, the administrative decision regarding classroom activities and support operations will be announced on the following stations at or before 6 a.m.: WBAL (AM/FM), WCAO (AM/FM), WFBR, WWN, WEBB, and the Morgan State University FM station, WEAA (FM 88.9).
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DIRECTIONS TO MORGAN STATE UNIVERSITY

FROM ANY DIRECTION VIA THE BALTIMORE BELTWAY (1-695)
Take 1-695 toward the northeastern portion of the beltway. Go south at exit 30, Perring Parkway. The Perring Parkway exit is east of the exits for Towson and west of the 1-95/1-695 interchange. Proceed south a few miles on Perring Parkway. Perring Parkway changes to Hillen Road at the Mitchell/Schaefer Engineering Building on the left.

FROM SOUTH OF BALTIMORE VIA 1-95
Take 1-95 north through the Ft. McHenry Tunnel. Exit at 1-95 at the Moravia Road Exit. (The distance to campus is about 3.5 miles.) Proceed through major intersections at Belair Road and then at Harford Road. Moravia Road becomes Cold Spring Lane at Harford Road. Cold Spring Lane goes through the middle of the campus.

FROM NORTH OF BALTIMORE VIA 1-95
Continue on 1-95 south past the interchange for the beltway, 1-695. Shortly thereafter, 1-95 will split into 1-895 (left two lanes) and 1-95 (right two lanes). Go to the left onto 1-895. Exit at the Moravia Road Exit. Bear to the right off the exit ramp onto Moravia Road. (The distance to campus is about 3.5 miles.) Proceed through major intersections at Belair Road and then at Harford Road. Moravia Road will become Cold Spring Lane at Harford Road. Cold Spring Lane goes through the middle of campus.

FROM THE SOUTH VIA 1-97 FROM ANNAPOLIS AREA AND EASTERN SHORE
When approaching the beltway (1-695) take exit for Harbor Tunnel. After tunnel, get off at Pulaski Hwy. (Rt. 40 East)/Erdman Avenue Exit. At end of exit ramp, go straight to Pulaski Hwy., Rt. 40 East. You will go up an incline with a Merit gas station on the right. Immediately beyond the Merit station, exit right onto Moravia Road. Continue straight on Moravia. Do not take any of the exits upon arriving at Moravia. (The distance to campus is about 3.5 miles.) Proceed through major intersections at Belair Road and then at Harford Road. Moravia Road becomes Cold Spring Lane at Harford Road. Cold Spring Lane goes through the middle of campus.

FROM DOWNTOWN BALTIMORE
Proceed north on Charles Street. Pass Johns Hopkins University on your left. At 33rd St. make a right. Take 33rd street to Hillen Road. Go north (turn left) on Hillen Road until you reach the campus.