

# Courses of Study

## Accounting

### Major

### Minor

### Combined BS/MBA Option

#### Professors:

Bandura, R. Johnson,  
Robinson (Chair), Shaffer-  
Wilson, D. Simmons

#### Associate Professors:

Groer, Hollar, Middleton

#### Instructor:

Gilmore

- This program may be completed on the Frostburg campus or at the Center in Hagerstown.
- You must have at least a 2.0 grade point average in Accounting Department offerings in order to graduate.
- MBA courses for the combined BS/MBA option may be completed at the Frostburg campus or at the Centers in Hagerstown or Frederick.

	For Major	For Minor	Combined BS/MBA
Hours Required in Accounting:	39	18	39
Hours Required in Other Departments:	39	0	111
Total Hours Required:	78	18	150

### Summary of Requirements for Major/Minor in Accounting

Major	Minor
<b>1. Introductory Level Courses:</b>	
<i>(6 hours)</i> ACCT 201* Introductory Accounting I ACCT 202* Introductory Accounting II	<i>(6 hours)</i> ACCT 201 Introductory Accounting I ACCT 202 Introductory Accounting II
<b>2. Intermediate Level Courses:</b>	
<i>(9 hours)</i> ACCT 301* Intermediate Accounting I ACCT 302* Intermediate Accounting II ACCT 305* Accounting Systems	<i>(3 hours)</i> ACCT 301 Intermediate Accounting I
<b>3. Distribution Within Department:</b>	
<i>(18 hours)</i> ACCT 315 Cost Accounting ACCT 316 Advanced Cost Accounting ACCT 325 Auditing ACCT 380 Business Law for Accountants ACCT 401 Advanced Financial Accounting I ACCT 420 Tax	<i>(0 hours)</i>
<b>4. Elective Hours in Department:</b>	
<i>(6 hours)</i>	<i>(9 hours)</i> <i>From courses numbered higher than 301</i>
<b>5. Required Courses in Other Departments:</b>	
<b>Business</b> <i>(9 hours)</i> BUAD 351 Management of Organizations BUAD 361 Principles of Marketing BUAD 376 Financial Management	
<b>Communication Studies:</b> <i>(3 hours)</i> CMST 102* Introduction to Human Communication	
<b>Computer Science:</b> <i>(6 hours)</i> COSC 100* Introduction to Computer Science COSC 220 Introduction to Software Applications	
<b>Economics:</b> <i>(6 hours)</i> ECON 201 Principles of Economics (Macro) <i>(GEP LAC Group D)</i> ECON 202 Principles of Economics (Micro)	
<b>Mathematics:</b> <i>(6 hours)</i> MATH 209 Elements of Applied Probability & Statistics <i>(GEP BR Math)</i> <i>and one from among:</i> MATH 220 Calculus for Applications MATH 106 Algebra with Calculus for Business	

### 6. Elective Courses: *(9 hours)*

**3 hours** in Economics (numbered higher than 202);

**6 hours** from among courses in Accounting, Business, Computer Science and/or Economics (numbered higher than 202). **Students who are accepted into the 150-hour combined BS in Accounting/MBA option must take MGMT 509 Managerial Communication and MGMT 512 Management Decision Analysis** (see option description for eligibility requirements).

*\*You must receive a grade of "C" or better for this course to count toward major.*

### **Combined B.S. in Accounting/MBA Program**

A 150-hour combined BS/MBA program enables eligible students to complete FSU's B.S. in Accounting and MBA degree programs with 150 hours of academic credit. Separate pursuit of these degrees would require 168 hours of course work. All CPA exam candidates in Maryland are required to complete 150 hours of academic credit. Completion of this combined BS/MBA program and an undergraduate elective course in Business Ethics will meet all requirements for CPA exam candidacy in Maryland. A Business Ethics course may be taken as a general elective in the 120-hour undergraduate degree program.

#### **Eligibility requirements for the combined BS/MBA**

- a) declared accounting major at FSU
- b) approved application for admission to 150-hour program
- c) cumulative and major GPA of 2.5 or better at the time of registration for MBA courses listed in item d below
- d) completion of MGMT 509 and 512 during the final semester of the undergraduate senior year.

### **Summary of Requirements for Combined BS/MBA Option**

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#### **Undergraduate Requirements for BS in Accounting**

**1. Complete requirements 1.-5. for major in accounting listed above.**

**6. Elective Courses:**

*(3 hours)*

3 hours in Economics (numbered higher than 202)

**7. Management courses required during final semester of senior year:**

*(6 hours)*

MGMT 509 Managerial Communication

MGMT 512 Management Decision Analysis

#### **Graduate Requirements for MBA**

**8. Complete the following MBA courses:**

*(30 hours)*

MGMT 510 The Leadership Process

MGMT 542 Human and Organizational Performance Systems

MGMT 554 The Political, Ethical, Regulatory and Legal Dimensions of Managing

MGMT 580 Strategic Planning and Analysis

MGMT 610 Financial Management

MGMT 620 Managing Organizational Change and Human Resource Policy

MGMT 630 Process Management

MGMT 640 Marketing Management

MGMT 680 Strategic Integration

MGMT 693 Field Experience in Management

# Actuarial Science

## Major

## Minor

### Coordinator:

Kathleen Elder, Associate Professor, Department of Mathematics

- The actuarial science program provides an environment which integrates the necessary knowledge and skills of a business executive, a mathematician, a financier and an investment manager.
- 66 credit hours of course work are required from five disciplines: mathematics, accounting, business administration, computer science, and economics.
- The program has two interrelated goals: to provide each student with a strong foundation in mathematics, and to help each student begin his/her preparation for a career as an actuary.
- Legal residents of Delaware, Kentucky, and Virginia may complete an actuarial science degree at Maryland resident tuition rates through the SREB Academic Common Market (see Admission section of this catalog).

	For Major	For Minor
Hours Required in Mathematics:	39	18
Hours Required in Other Departments:	27	3
<b>Total Hours Required:</b>	<b>66</b>	<b>21</b>

A strong background in mathematics and statistics is essential for persons interested in a career as an actuary. It is an advantage to pass, while still in school, one or more of the examinations offered by either the Society of Actuaries (SOA) or the Casualty Actuarial Society (CAS) in order to gain membership status. The first examination must be passed prior to graduation in order to complete the major requirements. An actuarial science minor is available for students majoring in business-related disciplines.

The general curricular requirements focus on four broad areas:

- Courses involving concepts and principles of mathematics and statistics: MATH 226, 227, 228, 320, 350, 380, 452, 480
- Courses involving applications: MATH 380, 435, 480, 481, 483, 484, 485
- Courses involving actuarial science: MATH 483, 484, 485
- Courses involving business-related areas: BUAD 371, ECON 201, 202, ACCT 201, 202, BUAD 351, 370

### Summary of Requirements for Major/Minor in Actuarial Science

Major	Minor
<p><b>1. Required Courses in Mathematics:</b> (39 hours)</p> <p>MATH 226 Calculus I (<i>GEP BR Math</i>)                      MATH 227 Calculus II                      MATH 228 Calculus III                      MATH 320 Multivariable Calculus                      MATH 350 Matrix Algebra                      MATH 452 Linear Algebra                      MATH 380 Introduction to Probability &amp; Statistics                      MATH 480 Probability &amp; Statistics                      MATH 481 Applied Regression Analysis                      MATH 435 Numerical Analysis                      MATH 483 Theory of Interest                      MATH 484 Actuarial Mathematics I                      MATH 485 Actuarial Mathematics II</p>	<p>(18 hours)</p> <p>MATH 226 Calculus I (<i>GEP BR Math</i>)                      MATH 227 Calculus II                      MATH 228 Calculus III                      MATH 320 Multivariable Calculus                      MATH 380 Introduction to Probability &amp; Statistics                      MATH 484 Actuarial Mathematics I</p>
<p><b>2. Required Courses in Other Departments:</b> (27 hours)</p> <p>ACCT 201 Introductory Accounting I                      ACCT 202 Introductory Accounting II                      BUAD 351 Management of Organizations                      BUAD 370 Corporate Finance                      BUAD 371 Principles of Insurance                      COSC 200 Computer Science I                      ECON 201 Principles of Economics (Macro) (<i>GEP LAC Group D</i>)                      ECON 202 Principles of Economics (Micro)                      CMST 102* Introduction to Human Communication</p>	<p>(3 hours)</p> <p>BUAD 371 Principles of Insurance</p>

\* You must receive a grade of C or better for this course to count toward major.

### 3. Passing score on first SOA Exam.

# Addictions Counselor Preparation

## Professional Certification Program

### Certificate

#### Advisor:

Ann R. Bristow, Professor,  
Department of Psychology

- You cannot major or minor in addictions counseling.
- You may receive credit-by-examination for the following courses: PSYC 210, 212, 386, 387, 388, 389, 417.

- Since the Addictions Counseling program is a regional collaboration with Allegany College of Maryland, with shared courses and faculty, you may count enrollments at either Frostburg State University or Allegany College of Maryland to meet the requirement that at least one-half of the credit hours required in the certificate be completed in residence. In addition, grades from courses completed while enrolled through Allegany will count in determining whether you meet the 2.0 minimum grade point average in certificate courses.

## Addictions Counselor Preparation

The Board of Examiners of Professional Counselors oversees the following regulations for Addictions Counselors in Maryland. There are three levels of certification, two of which are relevant to the undergraduate student and are briefly described below. For complete requirements for certification, please contact:

State Board of Examiners of Professional Counselors  
4201 Patterson Avenue  
Baltimore, Maryland 21215-2299  
(410) 764-4732

**Certified Supervised Counselor – Alcohol and Drug (CSC-AD):** 15 credit hours of alcohol and drug counselor training required and an associate's degree in a health or a human service counseling field.

**Certified Associate Counselor – Alcohol and Drug (CAC-AD):** 20 credit hours of alcohol and drug counselor training required and a bachelor's degree in a health or human services counseling field.

Several degree programs at FSU are board-approved degree programs in a health or human services counseling field: Business Education, Elementary/Early Childhood Education, Elementary Education, Health and Physical Education, Psychology, Social Work and Sociology. Completing one of these degree programs AND taking the required alcohol and drug counselor training courses, are the first steps in meeting certification requirements. At the bachelor's degree level you must also have at least three years or 3000 hours of supervised experience and two years of the experience must have been completed after the award of the degree. You will also have to pass an examination selected by the Board.

The credit hour requirement must be satisfied from the following content areas. Each area is followed by the appropriate FSU course(s); all are 3 credit courses except Ethics. Please be aware that although bachelor's degree counselors need only 20 credit hours from the following list to satisfy the course requirement, **your examination will cover ALL CONTENT AREAS.**

- |  |                                 |
|--|---------------------------------|
| 1. Pharmacology of Psychoactive Drugs                  | PSYC 386                        |
| 2. Individual Counseling Techniques                    | PSYC 410, SOWK 379              |
| 3. Group Therapy Techniques                            | PSYC 385/SOWK 385               |
| 4. Abnormal Psychology                                 | PSYC 417                        |
| 5. Addictions Treatment Delivery                       | PSYC 387                        |
| 6. Treatment Issues and Theory in Addictions           | PSYC 388                        |
| 7. Family Counseling*                                  | no undergraduate course offered |
| 8. Theories of Counseling and Psychotherapy            | no undergraduate course offered |
| 9. Human Life Span Development                         | PSYC 210 and 212, SOWK 375      |
| 10. Ethics for the Addiction Counselor (1 credit hour) | PSYC 389                        |

\* Although FSU does not currently offer an undergraduate course in family counseling, SOWK majors taking SOWK 470, Generalist Practice I, will find this course helpful in their preparation for family counseling issues covered on the examination.

## Addictions Counseling Certificate

If you would like to get a head start on professional certification for addictions counselors, you may complete the following undergraduate certificate as a degree-seeking or non degree-seeking student. You still must complete a bachelor's degree in one of the human services fields noted above as well as complete additional course work in order to sit for the state exam.

### Required Courses:

(16 hours)

PSYC 150 General Psychology  
PSYC 386 Drugs and Human Behavior  
PSYC 387 Addictions Treatment Delivery  
PSYC 388 Treatment Issues and Theory in Addictions  
PSYC 389 Ethics for the Addiction Counselor

ONE of the following:

SOWK 385 or PSYC 385 Generalist Practice with Groups *OR* Group Processes  
SOWK 379 or PSYC 410 Foundations for Social Work Practice *OR* Introduction to Counseling

# African American Studies

## Minor

### Coordinator:

Jean-Marie Makang  
Assistant Professor,  
Department of Philosophy

### Professors:

Bucchino (Philosophy),  
Bullamore (Geography),  
Wiseman (History)

### Associate Professors:

Coward (English),  
McLellan (Business  
Management), O'Rorke  
(Political Science), Rhodes  
(Visual Arts)

### Assistant Professors:

Makang (Philosophy),  
Moore (Sociology), Rossi  
(Economics), Saku  
(Geography)

- You may minor in African American Studies. There is no major available.
- All courses in African American Studies may be taken whether or not you wish to pursue the minor.
- A listing of Special Topics courses offered for the minor in future semesters is available through the Coordinator.

	For Minor
Hours Required in African American Studies:	9
Hours Required in Other Departments:	12
<b>Total Hours Required:</b>	<b>21</b>

## Summary of Requirements for Minor in African American Studies

Minor

### 1. Required Core Courses:

*(9 hours)*

AAST 200 Introduction to African American Studies  
AAST 300/HIST 301 Traditional Africa  
AAST 400 Africans of the Diaspora

### 2. Elective Courses:

*(12 hours)*

*A minimum of 3 hours must be taken from Humanities, and 3 hours from Social Sciences.*

#### Humanities

ART 302 Artistic Traditions: Africa and the Americas  
ENGL 231 African American Literature  
HIST 406 20th Century African American Leadership in the United States  
HIST 453 Contemporary Africa  
PHIL 311 Asian and African Philosophy  
Special Topics courses numbered 290, 403, 490, or 491 when approved by Coordinator

#### Social Sciences

ECON 313 Economics of Race and Gender  
GEOG 324 Urban Geography: Internal City Patterns  
GEOG 403 Geography of Sub-Sahara Africa  
POSC 456 Urban Politics and Policy  
PSYC 418 Social Psychology  
SOC 305 Racial and Cultural Minorities  
SOC 306 The Sociology of African Americans  
Special Topics courses numbered 290, 403, 490, or 491 when approved by Coordinator

#### Other

BUAD 352 Employment Law  
PHEC 415 The Black Athlete in American Society  
Independent Studies courses numbered 499 when approved by the Coordinator, limited to one 3-hour total enrollment.

# Art & Design

## Major

### Teaching Certification Option

#### Professors:

Davis (chair), Dieruf,  
Llewellyn

#### Associate Professors:

Brown, Rhodes, Sattinger

#### Assistant Professor:

Truman

- If you complete the major in Art & Design, you will earn the Bachelor of Fine Arts (BFA) degree.
- Minors are offered in art history, fine arts, and graphic design. A certificate is offered in Computer Print Graphics. See separate sections of catalog.
- You must successfully pass the 30 hour Core Review and Senior Review.
- Only courses in which a grade of C or better is earned may count towards satisfaction of major and minor requirements.
- Optional internships are available to qualifying students, particularly in graphic design. Student interns have been placed in government services, design studios, public relations firms and advertising businesses.
- You may elect the teaching certification option (internship required).

	For Major	For Teaching Cert. Option
Hours Required in Art:	60	60
Hours Required in Other Departments:	0	38.5
<b>Total Hours Required:</b>	<b>60</b>	<b>98.5</b>

### Summary of Requirements for BFA in Art & Design

#### Major

#### 1. Basic Courses:

(12 hours)

ART 104 Foundational Studies I  
ART 105 Foundational Studies II  
ART 212 Drawing  
ART 412 Advanced Drawing

#### 2. Introductory Studio:

(18 hours)

Choose from:

ART 202 Ceramics  
ART 207 Graphic Design  
ART 221 Painting  
ART 232 Printmaking  
ART 235 Photography  
ART 240 Sculpture  
ART 307 Computer Graphics *or* 236 Digital Imaging

*Note: Students wishing to specialize in Graphic Design must include 207, 235, 307. Students seeking certification to teach art must include 202, 221, 232, 240.*

#### 3. Core Review:

(0 hours)

ART 291 Core Review

#### 4. Art History and Critical Studies:

(12 hours)

ART 301 Artistic Traditions: Asia  
*or* ART 302 Artistic Traditions: Africa and the Americas  
ART 360 Western Art History  
ART 408 20th Century Art History  
ART 415 Art Criticism

#### 5. Advanced Studio Focus

(15 hours - 12 credit hours in focus and 3 credit hours in secondary area.)

ART 402 Advanced Ceramics  
ART \_\_\_\* Advanced Graphic Design  
ART 421 Advanced Painting  
ART 432 Advanced Printmaking  
ART 435 Advanced Photography  
ART 440 Advanced Sculpture

\*ART 407 Advanced Graphic Design: Print and Video Media

\*ART 414 Advanced Graphic Design: Interactive Multimedia Design

#### OR

#### Dual-Media Studio Focus+

(15 hours - 9 credit hours in focus and 6 hours in secondary area.)

ART 402 Advanced Ceramics  
ART \_\_\_Advanced Graphic Design+  
ART 421 Advanced Painting  
ART 432 Advanced Printmaking  
ART 435 Advanced Photography  
ART 440 Advanced Sculpture

*+Note: Only students seeking certification to teach art may have a Dual-Media focus in Graphic Design.*

#### 6. Senior Portfolio:

(3 hours)

ART 411 Senior Portfolio (*co-registration in ART 491 required*)

#### 7. Senior Review:

(0 hours)

ART 491 Senior Review (*co-registration in ART 411 required*)

- The discipline and/or education requirements for teaching certification may change as a result of NCATE program review requirements, or state or federal action. If you are interested in the teaching certification option, you should stay in close contact with the Department Chair or Coordinator and with the Department of Education Professions. It is to your advantage to complete an NCATE-approved program.

### Summary of Requirements for Teaching Certification Option in Art

If you wish to complete a Maryland State approved program in teaching Art, you must:

- Complete the BFA in Art and Design.
- Select the following courses in partial fulfillment of the Introductory Studio requirement:
  - ART 202 Ceramics
  - ART 221 Painting
  - ART 232 Printmaking
  - ART 240 Sculpture
- Meet the phase admissions requirements summarized in the Educational Professions section.
- Complete the professional education sequence described in Education: K-12 Programs.

## Art History

### Minor

#### Professors:

Davis (chair), Dieruf,  
Llewellyn

#### Associate Professors:

Brown, Rhodes, Sattinger

#### Assistant Professor:

Truman

- Minors are also offered in fine arts and graphic design. A major is offered in Art & Design. See separate listings in this catalog.
- Only courses in which a grade of C or better is earned may count towards satisfaction of major and minor requirements.
- You cannot major in Art History.

	For Minor
Hours Required in Art:	15-18
Hours Required in Other Departments:	3-0
<b>Total Hours Required:</b>	<b>18</b>

### Summary of Requirements for Minor in Art History

Minor

#### 1. Basic Courses:

(3 hours)

Choose from:

ART 100 Art Appreciation (*GEP LAC Group A*)

HIST 100 The Twentieth Century World (*GEP LAC Group B*)

#### 2. Core Courses:

(12 hours)

ART 301 Artistic Traditions: Asia

or ART 302 Artistic Traditions: Africa and the Americas

ART 360 Western Art History

ART 408 20th Century Art History

ART 415 Art Criticism

#### 3. Elective:

(3 hours)

Choose from:

ART 370 Women/Gender and the Visual Arts

ART 380 19th Century Art History

ART 430 Greek and Roman Art

ART 460 Renaissance and Baroque Art History

# Biology

## Major

## Minor

## Pre-health Professions Option

## Concentrations in biotechnology environmental science

## Teaching Certification Option

### Professors:

Barry, Harman, Morton  
(Chair), Riley, Yoder

### Associate Professors:

G. Brewer, Raesly, Seddon

### Assistant Professors:

Bernardo, Bowe, Fritz,  
Kutay, Li, Pegg, Serfass,  
Shumway

- You may elect the teaching certification option (internship required). Select the biology major without concentration to meet certification requirements.
- The discipline and/or education requirements for teaching certification may change as a result of NCATE program review requirements, or state or federal action. If you are interested in the teaching certification option, you should stay in close contact with the Department Chair or Coordinator and with the Department of Education Professions. It is to your advantage to complete an NCATE-approved program.

	For Major	For Minor	Pre-Health Prof. Option	Biotech. Concen.	Env. Science Concen.	Teaching Cert. Option
Hours Required in Biology:	39-40	24	40	43-44	36-42	39-40
Hours Required in Other Depts.:	32	0	32	39	45-51	74.5
<b>Total Hours Required:</b>	<b>71-72</b>	<b>24</b>	<b>72</b>	<b>82-83</b>	<b>87</b>	<b>113.5-114.5</b>

## Summary of Requirements for Major/Minor in Biology

Major	Minor
<p><b>1. Introductory Level Courses:</b> (8 hours) BIOL 149 General Biology I (GEP LAC Group C) BIOL 150 General Biology II</p> <p><b>2. Advanced Level Courses:</b> (15 hours) BIOL 304 Microbiology BIOL 310 Cell Biology BIOL 340 General Ecology BIOL 350 Genetics</p> <p><b>3. Distribution Within Department:</b> (16-17 hours) Total of 4 courses in 3 groups; at least 1 in each group: <b>Group I</b> BIOL 302 Animal Physiology BIOL 303 Plant Physiology <b>Group II</b> BIOL 411 Invertebrate Zoology Either BIOL 327 Comparative Anatomy or BIOL 426 Vertebrate Zoology <b>Group III</b> BIOL 311 Morphology of Thallophytes BIOL 312 Morphology of Embryophytes</p> <p><b>4. Elective Hours in Department:</b> (0 hours)</p> <p><b>5. Required Courses in Other Departments:</b> <b>Chemistry:</b> (18 hours) CHEM 101, 102 General Chemistry (101-GEP LAC Group C) CHEM 301, 302 Organic Chemistry <b>Mathematics:</b> (6 hours) MATH 209 Elements of Applied Probability &amp; Statistics (GEP BR Math) or MATH 219 Honors: Elements of Applied Probability &amp; Statistics Select one from: MATH 102 College Algebra (GEP BR Math) MATH 103 Trigonometry MATH 120 Pre-Calculus Mathematics (GEP BR Math) or any course above 210 <b>Physics:</b> (8 hours) PHYS 215, 216 General Physics I and II (215-GEP LAC Group C) or PHYS 261, 262 Principles of Physics I and II (261-GEP LAC Group C)</p>	<p>(8 hours) BIOL 149 General Biology I (GEP LAC Group C) BIOL 150 General Biology II</p>

- Biology is often selected as a major by students planning to enter medicine and other health professions careers. If you plan advanced study in the health professions, you should choose the pre-health professions option.

### **Pre-Health Professions Option for Biology Majors**

*(Pre-Dental, Pre-Medical, Pre-Optometry and Pre-Veterinary)*

#### **1. Introductory Level Courses:**

*(8 hours)*

BIOL 149 General Biology I *(GEP LAC Group C)*

BIOL 150 General Biology II

#### **2. Advanced Level Courses:**

*(28 hours)*

BIOL 302 Animal Physiology

BIOL 304 Microbiology

BIOL 310 Cell Biology

BIOL 311 Morphology of the Thallophytes

*or* BIOL 312 Morphology of the Embryophytes

BIOL 327 Comparative Anatomy

BIOL 340 General Ecology

BIOL 350 Genetics

#### **3. Elective Hours in Biology Department:**

*(4 hours)*

*Choose 1 course:*

BIOL 306 Vertebrate Embryology

BIOL 404 Histology

BIOL 412 General Parasitology

#### **4. Required Advanced Courses in Other Departments:**

*(32 hours)*

*Same as major. See #5 above.*

- The biotechnology concentration in biology offers you an interdisciplinary program with a strong emphasis on laboratory experiences in biology and chemistry, while maintaining a strong biology core. The option is best suited for students who wish to pursue an advanced degree in cell or molecular biology or to find employment in the biotechnology industry.

### **Summary of Requirements for Major in Biology - Biotechnology Concentration**

#### **1. Introductory Level Courses:**

*(8 hours)*

BIOL 149 General Biology I *(GEP LAC Group C)*

BIOL 150 General Biology II

#### **2. Advanced Level Courses:**

*(15 hours)*

BIOL 304 Microbiology

BIOL 310 Cell Biology

BIOL 340 General Ecology

BIOL 350 Genetics

#### **3. Biotechnology Option:**

*(17 hours)*

BIOL 401 Genetics Lab

BIOL 435 Molecular Biology

BIOL 437 Molecular Biology Seminar

BIOL 438 Biotechnology Laboratory *(you must complete a total of 3 cr.)*

BIOL 440 Developmental Biology

BIOL 445 Immunology

#### **4. Select one from:**

*(3-4 hours)*

BIOL 302 Animal Physiology

BIOL 303 Plant Physiology

BIOL 404 Histology

BIOL 436 Electron Microscopy

BIOL 499 Special Problems in Biology

*or* IDIS 493 Honors Thesis

**5. Required Courses in Other Departments:****Chemistry:***(25 hours)*CHEM 101 General Chemistry I *(GEP LAC Group C)*

CHEM 102 General Chemistry II

CHEM 301 Organic Chemistry I

CHEM 302 Organic Chemistry II

CHEM 455 Biochemistry I

CHEM 456 Biochemistry Lab

CHEM 457 Biochemistry II

**Mathematics:***(6 hours)*

MATH 209 Elements of Applied Probability &amp; Statistics

*or* Math 219 Honors: Elements of Applied Probability & Statistics*Select one from:*

MATH 220 Calculus for Applications I

MATH 226 Calculus

**Physics:***(8 hours)*

PHYS 215, 216 General Physics I and II

*or* PHYS 261, 262 Principles of Physics I and II

- For students interested in the stewardship of natural resources with a greater emphasis on economic and political perspectives.
- This concentration allows you to choose electives in economics, political science and the humanities which potentially add a thematic direction to your degree.
- You should not choose this concentration if you are in pre-health professions or planning to attend a traditional biology graduate program.

**Summary of Requirements for Major in Biology - Environmental Science Concentration****1. Introductory Level Courses:***(17 hours)*BIOL 149 General Biology I *(GEP LAC Group C)*

BIOL 150 General Biology II

ECON 201/211\* Macroeconomics *(GEP LAC Group D)*GEOG 103/113\* Physical Geography *(GEP LAC Group C)*

POSC 110/112\* Introduction to American Politics

*or* POSC 113/114\* Introduction to World Politics *(GEP LAC Group D)**or* POSC 131 Introduction to Comparative Politics*(Check the prerequisites for other POSC courses before choosing your introductory POSC course)***2. Advanced Level Courses:***(43 hours)*

BIOL 200 Scientific Investigation and Communication

BIOL 304 Microbiology

BIOL 310 Cell Biology

BIOL 340 General Ecology

BIOL 350 Genetics

BIOL 406 Ornithology

*or* BIOL 423 Mammalogy*or* BIOL 426 Vertebrate Zoology

BIOL 425 Forest Science

BIOL 450 Ecology and Management of Wildlife Populations

*or* BIOL 420 Fish Management and Culture

GEOG 473 Environmental Law

ECON 202 Microeconomics

BIOL 494 Field Experiences in Biological Sciences

*or* ECON 495 Internship in Economics *(co-registration in ECON 492 is required)**or* POSC 495 Internship in Political Science *(co-registration in POSC 492 is required)**(6 credits minimum)*

**3. Required Supporting Courses:***(18 hours)*CHEM 101 General Chemistry I (*GEP LAC Group C*)

CHEM 102 General Chemistry II

CHEM 420 Environmental Chemical Analysis

MATH 209/219\* Elements of Applied Probability & Statistics (*GEP BR Math*)MATH 102 College Algebra (*GEP BR Math*)*or* MATH 103 Trigonometry*or* MATH 120 Pre-Calculus Mathematics (*GEP BR Math*)*or any MATH course above 210***4. Electives:***(9 hours)**Select at least three courses listed below. At least one course must be taken from each group.***Group I Advanced Economics**

ECON 309 Comparative Economic Systems

ECON 405 Economic Growth and Development: The Developing Economies

**Group II Advanced Political Science**

POSC 330 Politics of Africa

POSC 331 Politics of Latin America

POSC 332 Politics of the Middle East

POSC 450 Environmental Public Policy

GEOG 407 Political Geography

**Group III Advanced Humanities**

ENGL 440 Literature of the Environment

HIST 309 World Environmental History

PHIL 315 Philosophy and the Environment

**Summary of Requirements for Teaching Certification Option in Biology**

If you wish to complete a Maryland State approved program in teaching Biology, you must:

- Complete the BA/BS in Biology (without concentration).
- Meet the phase admissions requirements summarized in the Educational Professions section.
- Complete the professional education sequence described in Education: Secondary School Programs.

# Business Administration

	For Major	For Minor
Hours Required in Business Administration:	39-45	15
Hours Required in Other Departments:	27-33	6
<b>Total Hours Required:</b>	<b>72</b>	<b>21</b>

## Major

## Minor

### Concentrations in: management marketing finance

#### Professors:

Plucinski, Poorsoltan

#### Associate Professors:

Rahman, Shah, Shin (co-chair), Singh, Tootoonchi

#### Assistant Professors:

LaFief, Parker, Shelleman, Shields

- Major consists of core courses (48 hours) in two phases, and a concentration. Majors must choose from among concentrations in Management, Marketing, or Finance.
- Internship available.
- Phase I requires a student to:
  - a. complete 55 hours with an overall GPA as established by the department, AND
  - b. complete the following courses in the major:
    - ACCT 201, 202
    - BUAD 291
    - ECON 201, 202
    - COSC 220
    - MATH 106 or 220
    - MATH 209
- Students must apply for admission to Phase II of the program in the semester when Phase I requirements will be satisfied. Contact the department for current Phase I GPA requirements and application procedures for Phase II.
- Major may be completed on the Frostburg campus, at the Center in Hagerstown, or at the Center in Frederick.

## Summary of Requirements for Major/Minor in Business Administration

Major	Minor
<b>1. Basic Courses:</b>	
<i>(3 hours)</i>	<i>(3 hours)</i>
BUAD 291 *Legal Environment of Business	BUAD 100 Introduction to Business <i>or</i> BUAD 291 Legal Environment of Business <i>or</i> ACCT 380 Business Law for Accountants <i>(for accounting majors only)</i>
<b>2. Advanced Courses:</b>	
<i>(18 hours)</i>	<i>(12 hours)</i>
BUAD 351 *Management of Organizations	BUAD 351 Management of Organizations
BUAD 355 Operations Management	BUAD 361 Principles of Marketing
BUAD 356 Leadership & Interpersonal Skills	BUAD 303 Principles of Finance
BUAD 361 *Principles of Marketing	<i>or</i> BUAD 370 Corporate Finance
BUAD 370 *Corporate Finance	<i>or</i> BUAD 376 Financial Management
BUAD 485 *Business Policy and Strategy	BUAD 356 Leadership & Interpersonal Skills <i>or</i> BUAD 320 Microcomputer Applications in Business
<b>3. Area of Concentration:</b>	
<i>(21-24 hours)</i>	
<i>Majors must choose to concentrate in one of the following:</i>	
● Management	
● Marketing	
● Finance	
<i>(Requirements for each are specified below.)</i>	
<b>4. Required Courses in Other Departments:</b>	
<b>Accounting</b> <i>(6 hours)</i>	<i>(3 hours)</i>
ACCT 201 *Introductory Accounting I	ACCT 100 Financial Accounting
ACCT 202 *Introductory Accounting II	<i>or</i> ACCT 201 Introductory Accounting I
<b>Communication Studies</b> <i>(3 hours)</i>	
CMST 102 *Intro. to Human Communication	
<b>Computer Science</b> <i>(6 hours)</i>	
COSC 100 *Introduction to Computer Science	
COSC 220 Introduction to Software Applications	
<b>Economics</b> <i>(6 hours)</i>	<i>(3 hours)</i>
ECON 201 *Principles of Economics (Macro) <i>(GEP LAC Group D)</i>	ECON 200 Basic Economics
ECON 202 *Principles of Economics (Micro)	<i>or</i> ECON 201 Principles of Economics (Macro) <i>(GEP LAC Group D)</i>
<b>Mathematics</b> <i>(6 hours)</i>	
MATH 106 Algebra w/Calculus for Business	
<i>or</i> MATH 220 Calculus for Applications I	
MATH 209 Elements of Applied Probability and Statistics <i>(GEP BR Math)</i>	

*\*You must receive a grade of C or better for this course to count toward major.*

## Requirements for Concentration in Management

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- 1. Core Courses (48 hours):**  
Required of all majors in Business Administration; listed above.
- 2. Advanced Business Administration Courses (3 hours):**  
Required of all students concentrating in Management  
BUAD 320 Microcomputer Applications in Business
- 3. Area of Focus and Distribution (21 hours):**  
*Complete one of the following areas of focus:*

### General Management

#### A. Required Courses (9 hours):

BUAD 330 International Business  
BUAD 357 Human Resources Management  
ACCT 310 Managerial Accounting for Business  
or BUAD 376 Financial Management

#### B. Elective Courses (12 hours):

*Four from among the following:*

BUAD 359 Total Quality Management  
BUAD 415 New Business Ventures  
BUAD 450 International Management  
BUAD 455 Management Information Systems  
BUAD 480 Business & Society  
BUAD 491 Seminar (Management)  
ECON 305 Managerial Economics

### Human Resource Management

#### A. Required Courses (15 hours):

BUAD 352 Employment Law  
BUAD 357 Human Resources Management  
BUAD 452 Staffing and Development  
BUAD 456 Compensation Management  
BUAD 457 Labor Relations

#### B. Elective Courses (6 hours):

*Two from among the following:*

BUAD 359 Total Quality Management  
BUAD 491 Seminar (Management)  
ECON 301 Labor Economics  
PSYC 360 Industrial/Organizational Psychology

### Small Business/Entrepreneurship

#### A. Required Courses (12 hours):

BUAD 357 Human Resources Management  
BUAD 359 Total Quality Management  
BUAD 366 Consumer Behavior  
BUAD 415 New Business Ventures

#### B. Elective Courses (9 hours):

*Three from among the following:*

BUAD 364 Retail Management  
BUAD 371 Principles of Insurance  
BUAD 381 Principles of Real Estate  
BUAD 466 Services Marketing  
BUAD 491 Seminar (Management)  
BUAD 494 Field Experience in BUAD

## Requirements for Concentration in Marketing

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- 1. Core Courses (48 hours):**  
Required of all majors in Business Administration; listed above.
- 2. Advanced Business Administration Courses (24 hours):**  
BUAD 363 Advertising  
BUAD 365 Principles of Selling  
BUAD 366 Consumer Behavior  
BUAD 462 Marketing Research  
BUAD 465 Marketing Strategies  
BUAD 469 Marketing Plans Development  
  
*and 2 from:*  
BUAD 364 Retail Management  
BUAD 460 International Marketing  
BUAD 461 Integrated Marketing Communications  
BUAD 463 Marketing Research II: Field Surveys  
BUAD 466 Services Marketing

## Requirements for Concentration in Finance

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- 1. Core Courses (48 hours):**  
Required of all majors in Business Administration; listed above.
- 2. Advanced Business Administration Courses (18 hours):**  
BUAD 375 Financial Institutions Management  
BUAD 376 Financial Management  
BUAD 475 Securities Investment  
BUAD 479 Financial Policy  
  
*and 1 from:*  
BUAD 371 Principles of Insurance  
BUAD 377 Pension Fund Management  
BUAD 381 Principles of Real Estate  
  
*and 1 from:*  
BUAD 373 Commercial Bank Management  
BUAD 470 International Financial Management  
BUAD 478 Options and Futures  
BUAD 491 Seminar (Finance)
- 3. Required Courses in Other Departments (6 hours):**  
*Two from among the following:*  
ACCT 301 Intermediate Accounting I  
ACCT 302 Intermediate Accounting II  
ACCT 340 Financial Reporting Issues  
ACCT 420 Tax  
ECON 351 Intermediate Macro-Economics  
ECON 352 Intermediate Micro-Economics  
ECON 401 International Finance  
ECON 407 Business Cycles and Forecasting

# Business Minor

## for Science & Technology Majors

### Minor

#### Coordinator:

Hung Sik Shin, Co-Chair,  
Department of Business  
Management

- The combination of your science/technology disciplinary training and an understanding of modern business and managerial practices can give you a competitive advantage in the workplace.
- This minor is open only to students majoring in:
  - Biology
  - Chemistry
  - Computer Science
  - Earth Science
  - Engineering
  - Environmental Analysis and Planning
  - Mathematics
  - Physics

	For Minor
Hours Required in Business Administration:	18
Hours Required in Other Departments:	6
<b>Total Hours Required:</b>	<b>24</b>

### Summary of Requirements for Minor in Business for Science & Technology Majors

#### Minor

#### 1. Business Administration Courses:

*(18 hours)*

BUAD 100 Introduction to Business  
 BUAD 303 Principles of Finance  
 BUAD 351 Management of Organizations  
 BUAD 356 Leadership & Interpersonal Skills  
 BUAD 361 Principles of Marketing  
 BUAD 494 Field Experience in Business Administration  
 or BUAD 492 & 495 [Optional] Internship, including research paper

#### 2. Economics

*(3 hours)*

ECON 200 Basic Economics (*GEP LAC Group D*)

#### 3. Accounting

*(3 hours)*

ACCT 100 Financial Accounting

# Business Education

## Major

### Coordinator:

Thomas Palardy, Professor,  
Department of Educational  
Professions

- A cooperative program between the Business Administration and Educational Professions Departments of FSU and the Office Technologies Department of Allegany College of Maryland. We prefer that you complete the requirements of the first two years elsewhere and take the last two years at FSU. The following are the minimum lower division undergraduate requirements which must be completed if you transfer to FSU from a two-year college other than Allegany College of Maryland:

**Keyboarding** (2 semesters including intermediate and one more advanced course, or the completion of the more advanced course with a grade of at least C.)

**Shorthand/Transcription** (2 semesters including intermediate and one more advanced course, or the completion of the more advanced course with a grade of at least C.)

**One 3-hour course in each of the following:** office communications, office applications, word processing, and secretarial office procedures.

- The discipline and/or education requirements for teaching certification may change as a result of NCATE program review requirements, or state or federal action. If you are interested in the teaching certification option, you should stay in close contact with the Department Chair or Coordinator and with the Department of Education Professions. It is to your advantage to complete an NCATE-approved program.
- Required secretarial internship and teaching internship.

For Major

Hours Required at AC*	33
Hours Required at FSU	66.5
Total Hours Required:	99.5

## Summary of Requirements for Major in Business Education

### Required Courses at Allegany College of Maryland\*

#### 1. Secretarial Science:

(24 hours)

Off.Tech. 102 Intermediate Keyboarding  
Off.Tech. — Keyboarding/Information Processing Elective  
Off.Tech. 103 Office Notetaking *or* Off.Tech. 104 Office Transcription  
Off.Tech. — Transcription Elective  
Off.Tech. 106 Office Communication  
Off.Tech. 114 Word Processing I  
Off.Tech. 201 Electronic Office Applications  
Off.Tech. 210 Secretarial Office Procedures

#### 2. Data Processing:

(3 hours)

Comp Tech 101 Introduction to Computer Science

#### 3. Business Administration:

(6 hours)

BusAd. 201 Principles of Accounting, I  
BusAd. 202 Principles of Accounting, II

*Note: Business Administration courses are also offered at Frostburg.*

### Required Courses at Frostburg State University

#### 1. Business Administration:

(12 hours)

BUAD 291 Legal Environment of Business  
BUAD 320 Microcomputer Applications in Business  
BUAD 351 Management of Organizations  
BUAD 361 Principles of Marketing

#### 2. Computer Science:

(3 hours)

COSC 220 Introduction to Software Applications

#### 3. Economics:

(6 hours)

ECON 201 Principles of Economics (Macro)  
ECON 202 Principles of Economics (Micro)

#### 4. Mathematics:

(3 hours)

A mathematics course acceptable in FSU's General Education Program

#### 5. Professional Education Sequence:

(42.5 hours)

See professional education sequence described in Education: Secondary Programs and the Phase Admissions requirements summarized in the Educational Professions section of this catalog.

*\*Note: Allegany College of Maryland courses are used to determine the equivalency of other two-year college courses.*

# Chemistry

## Major

## Minor

### Track in traditional chemistry

### Concentrations in: professional chemistry biochemistry

### Teaching certification option

#### Professor:

Weser

#### Associate Professors:

Larivee, Senese

#### Assistant Professors: Mumper (Chair), Simon

- All chemistry majors must take the core courses and select either the Traditional Track, Professional Concentration, Biochemistry Concentration or Teaching Certification Option to fulfill requirements for the major. The Traditional Track is recommended for students wishing to double major.
- Chemistry is often selected as a major by students planning to enter health professions careers. The Biochemistry Concentration is a suitable choice. (See the section on Health Professions Preparation of this catalog.)
- The discipline and/or education requirements for teaching certification may change as a result of NCATE program review requirements, or state or federal action. If you are interested in the teaching certification option, you should stay in close contact with the Department Chair or Coordinator and with the Department of Education Professions. It is to your advantage to complete an NCATE-approved program.

	Trad. Track	For Major Profess. Con.	Biochem. Con.	Teaching Certification	For Minor
Hours Required in Chemistry:	38	48	40	41	25
Hours Required in Other Departments:	20	24	29	63.5	0
Total Hours Required:	58	72	66	104.5	25

## Summary of Requirements for Major/Minor in Chemistry

Major	Minor
<p><b>1. Core Introductory Level Courses:</b> (8 hours) CHEM 101 General Chemistry I (GEP LAC Group C) CHEM 102 General Chemistry II</p>	<p>(8 hours) CHEM 101 General Chemistry I (GEP LAC Group C) CHEM 102 General Chemistry II</p>
<p><b>2. Core Advanced Courses:</b> (22 hours) CHEM 300 Computational Tech. in Chem CHEM 301 Organic Chemistry I CHEM 302 Organic Chemistry II CHEM 320 Quantitative Anal. Chem. CHEM 441 Physical Chem. Lecture I CHEM 445 Physical Chemistry Lab I CHEM 491 Seminar in Chemistry I CHEM 492 Seminar in Chemistry II</p>	<p>(17 hours) CHEM 301 Organic Chemistry I CHEM 302 Organic Chemistry II 7 additional hours in Chemistry, 300 level or above</p>

### 3. Required Courses in Other Departments:

#### Mathematics: (6 hours)

MATH 226 Calculus I (GEP BR Math)

MATH 227 Calculus II

#### Physics: (8 hours)

PHYS 215, 216 General Physics I, II (215: GEP BR Group C)

or PHYS 261, 262 Principles of Physics I, II (261: GEP BR Group C)

### 4. Choice of Specialization:

(14-56.5 hours)

Majors must choose the Traditional Track, Professional Concentration, Biochemistry Concentration or Teaching Certification Option. Requirements listed below.

## Requirements for the Traditional Track for Chemistry Majors

### 1. Core Courses:

(44 hours)

Required of all Chemistry majors, listed above

### 2. Advanced Courses:

(8 hours)

CHEM 421 Instrumental Analysis

CHEM 442 Physical Chemistry II

CHEM 446 Physical Chemistry Lab II

### 3. Required Courses in Mathematics:

(6 hours)

MATH 228 Calculus III

and one from among:

MATH 320 Multivariable Calculus

MATH 432 Differential Equations

- The Professional Concentration is a strong program for graduate school preparation.

### Requirements for the Professional Concentration for Chemistry Majors

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**1. Core Courses:**

*(44 hours)*

Required of all Chemistry majors, listed above.

**2. Additional Core Courses:**

*(12 hours)*

CHEM 411 Advanced Inorganic Chemistry

CHEM 421 Instrumental Analysis

CHEM 442 Physical Chemistry II

CHEM 446 Physical Chemistry Lab II

**3. Advanced Courses**

*(6-7 hours)*

CHEM 455 Biochemistry I

CHEM 493 Research in Chemistry *(1-3 hours)*

*If less than three hours of CHEM 493 are taken, then one additional advanced course from among the following is required:*

CHEM 438 Advanced Organic Chemistry

CHEM 457 Biochemistry II

CHEM 460 Environmental Chemistry

CHEM 490 Selected Topics in Chemistry

**4. Required Courses in Other Departments**

**Mathematics:** *(6 hours)*

MATH 228 Calculus III

*And one from among:*

MATH 320 Multivariable Calculus

MATH 432 Differential Equations

### Requirements for the Biochemistry Concentration for Chemistry Majors

(Pre-Dental, Pre-Medical, Pre-Optometry, Pre-Veterinary, Pre-Pharmacy)

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**1. Core Courses:**

*(44 hours)*

Required of all Chemistry majors, listed above.

**2. Advanced Courses:**

*(7 hours)*

CHEM 455 Biochemistry I

CHEM 456 Biochemistry Lab

CHEM 457 Biochemistry II

**3. Required Courses in Biology:**

*(15 hours)*

BIOL 149 General Biology I

BIOL 304 Microbiology

BIOL 350 Genetics

BIOL 490 Molecular Biology

**4. Required Electives:**

*(3-4 hours)*

*Select from among:*

CHEM 411 Advanced Inorganic Chemistry

CHEM 420 Environmental Chemical Analysis

CHEM 421 Instrumental Analysis

CHEM 442 Physical Chemistry II

CHEM 493 Research in Chemistry *(3 hours minimum)*

MATH 228 Calculus III

# BS in Chemistry/ Doctor of Pharmacy

## Dual-degree program

### Coordinator:

Don Weser, Professor,  
Department of Chemistry

- This program allows you to earn both degrees in a seven-year period.
- The chemistry degree from FSU will be a BS in Chemistry, Biochemistry concentration.
- In this program you attend FSU for three years and the University of Maryland School of Pharmacy for four years. After completing the academic requirements at FSU (three years for most students), you will take the PCAT (entrance exam) and

## Requirements for the Teaching Certification Option in Chemistry

### 1. Core Courses:

(44 hours)

Required of all Chemistry majors, listed above.

### 2. Advanced Courses:

(11 hours)

CHEM 411 Advanced Inorganic Chemistry

CHEM 442 Physical Chemistry II

CHEM 446 Physical Chemistry Lab II

CHEM 455 Biochemistry I

CHEM 460 Environmental Chemistry

CHEM 493 Research in Chemistry (1 hour)

### 3. Required Courses in Other Departments

(7 hours)

MATH 228 Calculus III

BIOL 149 General Biology

### 4. Required Courses in Education

(42.5 hours)

See Professional Education sequence for Secondary Programs in the Educational Professions section of this catalog.

	For Pre-professional Program
Hours Required at Frostburg State University:	90
Hours Required at UM School of Pharmacy:	30
Total Hours for B.S. in Chemistry:	120

## Summary of Requirements at FSU for Dual-degree in Chemistry/Pharmacy

### 1. Chemistry

(26 hours)

CHEM 101 & 102 General Chemistry I & II (101 - GEP LAC Group C)

CHEM 301 & 302 Organic Chemistry I & II

CHEM 300 Computational Techniques in Chemistry

CHEM 320 Quantitative Analysis

CHEM 491 & 492 Seminar in Chemistry I & II

### 2. Biology

(15 hours)

BIOL 149 General Biology I (GEP LAC Group C)

BIOL 304 Microbiology

BIOL 350 Genetics

BIOL 435 Molecular Biology

### 3. Mathematics

(9 hours)

MATH 226 & 227 Calculus I & II (226 - GEP BR Math)

MATH 209 Elements of Prob. and Stat. (GEP BR Math)

or

MATH 380 Intro. to Prob. and Stat.

### 4. Physics

(8 hours)

PHYS 215 & 216 Gen. Physics I & II (215 - GEP BR Group C)

or PHYS 261 & 262 Princ. of Physics I & II (261 - GEP BR Group C)

apply for admission to UM School of Pharmacy. If granted admission, you will attend the UM School of Pharmacy for four years and attain the Doctor of Pharmacy. After completion of a year at the UM School of Pharmacy with at least a 2.0 (C) average, you will apply for, and be granted a BS in Chemistry from FSU.

- In the event you are not admitted to the UM School of Pharmacy, you will be equipped to apply to other Pharmacy schools, or to complete the BS in Chemistry at FSU.
- The Department of Chemistry also offers concentrations in Professional Chemistry and Biochemistry, a Traditional Chemistry track, and a secondary teaching certification option.

### Dual Degree Requirements at FSU

1. Completion of required courses in the dual degree study program (listed above), 58 semester hours.
2. Completion of a minimum of ninety (90) semester hours, including at least a minimum of thirty (30) credits total and fifteen (15) upper-division credits at Frostburg State University.
3. Completion of the FSU General Education Program.
4. Completion of at least one-half of the semester hours required in the biochemistry concentration of the chemistry degree program through course work or special departmental exams at FSU.
5. Be admitted to the University of Maryland School of Pharmacy and successfully complete the first year courses in the Doctor of Pharmacy degree program with a grade point average of 2.0 (C) or better.
6. Admission to the University of Maryland School of Pharmacy is not guaranteed. If not accepted into the University of Maryland School of Pharmacy, complete BS in chemistry, biochemistry track at FSU.

## Coaching

### Minor

**Coordinator:**

Kurt Wolfe, Professor of Health, Physical Education & Recreation

**Professors:**

Lewis, Surgent, K. Wolfe

**Assistant Professors:**

Irwin, Wright

**Instructor:**

Strieby

**Head Athletic Trainer**

Zaloga

- Field experience required in school program. Recommended during senior year.

- You cannot major in coaching.

	For Minor
Hours Required in HPE:	22
Hours Required in Other Departments:	0
<b>Total Hours Required:</b>	<b>22</b>

### Summary of Requirements for Minor in Coaching

Minor

*All of the following:  
(16 hours)*

- HEED 305 Care and Prevention of Athletic Injuries
- PHEC 163 Strength Training and Conditioning
- PHEC 405 Psycho-Social Foundations of Sport
- PHEC 412 Principles of Coaching
- PHEC 420 Sports Law and Ethics
- PHEC 481 Field Experience in Coaching

*Two from among:  
(6 hours)*

- PHEC 360 Theory of Track & Field
- PHEC 361 Theory of Football
- PHEC 362 Theory of Baseball
- PHEC 364 Theory of Basketball
- PHEC 365 Theory of Volleyball
- PHEC 366 Theory of Soccer
- PHEC 369 Theory of Softball

# Communication Studies

	For Major	For Minor
Hours Required in Communication Studies:	21-33	21
Hours Required in Other Departments:	6-18	3
<b>Total Hours Required:</b>	<b>39</b>	<b>24</b>

## Summary of Requirements for Major/Minor In Communication Studies

### Major

### Minor

#### Professors:

Routhier, Wallinger

#### Associate Professor:

Kagey

- Only courses in which you earn a grade of C or better may count towards satisfaction of major or minor requirements.
- All grades earned in courses completed for the major in Communication Studies count in determining whether you meet the graduation requirement of a 2.0 cumulative grade point average in the major.

#### Major

#### Minor

### 1. Communication Studies Core Courses:

(18 hours)

All of the following:

CMST 102/112 Intro. to Human Comm.  
 CMST 300 Interpersonal Communication  
 CMST 302 Argumentation & Advocacy  
 CMST 312 Language Behavior & Comm.  
 CMST 485 Issues & Responsibilities of Comm.

and one from:

CMST 422 Seminar in Comm. Analysis  
 CMST 451 Seminar in Communication Theory

### 2. Communication Studies Tracks:

(12 hours)

Select one of the following tracks:

#### a. Professional Communication

CMST 215 Small Group Communication  
 CMST 225 Interviewing  
 CMST 322 Presentational Communication  
 CMST 335 Organizational Communication

#### b. Interdisciplinary Track

Select an additional four courses to create a definable Communication Studies Track. *This option requires the collaboration and written approval of your faculty advisor.*

You may select courses in art and design, business administration, communication studies, computer science, English, mass communication, philosophy, political science, psychology, and sociology.

### 3. Practicum:

(3 hours)

You are required to participate in a three-credit Practicum. This requirement may be met by completing three credits of CMST 494 Communication Studies Practicum, or by completing the graded academic portion of the internship course CMST 492 Internship Project.

### 4. Required Courses in Other Departments:

(6 hours)

COSC 100 Introduction to Computer Science  
 MCOM 105 Intro. to Mass Communication

(21 hours)

All of the following:

CMST 102/112 Introduction to Human Communication  
 CMST 485 Issues & Responsibilities of Communication

and one from:

CMST 300 Interpersonal Communication  
 CMST 302 Argumentation and Advocacy  
 CMST 312 Language Behavior & Comm.

and one from:

CMST 422 Seminar in Comm. Analysis  
 CMST 451 Seminar in Communication Theory

and three additional courses from:

CMST 215 Small Group Communication  
 CMST 225 Interviewing  
 CMST 300 Interpersonal Communication  
 CMST 302 Argumentation and Advocacy  
 CMST 312 Language Behavior & Comm.  
 CMST 322 Presentational Communication  
 CMST 335 Organizational Communication  
 CMST 422 Seminar in Comm. Analysis  
 CMST 451 Seminar in Communication Theory

### 2. Required Courses in Other Departments:

(3 hours)

MCOM 105 Intro. to Mass Communication

# Computer Print Graphics

## Certificate

### Professors:

Davis (chair), Dieruf, Llewellyn

### Associate Professors:

Brown, Rhodes, Sattinger

### Assistant Professor:

Truman

- The certificate in Computer Print Graphics is offered by the Department of Visual Arts. The department also offers a B.F.A. in Art and Design and minors in art history, fine arts, and graphic design.
- You should consider this certificate if you are a degree-seeking student in another major who would like to acquire additional skills to enhance your professional marketability or a community member seeking professional education in the technology sector.
- Classes are scheduled so you can complete the certificate in four semesters.

	For Certificate
Hours Required in Art:	24
Hours Required in Other Departments:	0
<b>Total Hours Required:</b>	<b>24</b>

The certificate in Computer Print Graphics is designed to assist you to:

- Understand the role a computer plays in a graphic designer's career
- Learn the basic functions of the Macintosh computer
- Gain fundamental knowledge of graphic applications like QuarkXpress, Adobe Illustrator, Adobe Photoshop
- Learn reproduction and manipulation of scanned images
- Create comprehensive layouts
- Develop a personal design style and vocabulary based on knowledge of past and contemporary design trends, materials, and commercial printing techniques.

Students may transfer a maximum of 12 credits into the program selected from ART 104, ART 105, ART 207, ART 212, and ART 412.

## Summary of Requirements for Certificate in Computer Print Graphics

Minor

### 1. Required Courses:

*(24 hours)*

- ART 104 Foundational Studies I
- ART 105 Foundational Studies II
- ART 207 Graphic Design\*
- ART 212 Drawing
- ART 307 Computer Graphics
- ART 407 Advanced Graphic Design - Print (Level I)
- ART 407 Advanced Graphic Design - Print (Level II)
- ART 412 Advanced Drawing

*\* For students taking courses concurrently, the prerequisite of ART 104 may be waived by permission of the instructor.*

College-level proficiency in English is required, as evidenced by a passing score on the English placement exam, completion of ENGL 101 or completion of its equivalent at another institution.

# Computer Science

## Major

## Minor

### Concentration in: information systems

#### Professors:

Chitsaz, Tracy

#### Associate Professors:

Owens (Chair), Rinard,  
Slemmer

#### Assistant Professors:

Crall, Kranz, Thiel

- The Department of Computer Science also offers four certificates to students in other majors and community members. (See separate section).
- Computer Science courses must have a grade of C or better to be applied towards major or minor requirements.
- You may receive credit by examination for the following courses: 100, 200, 350.
- If you have no programming experience, you are strongly encouraged to complete COSC 130 prior to enrollment in COSC 200.

	For Major	For Minor	For Info. Systems Concentration
Hours Required in Computer Science:	42	18	39
Hours Required in Other Departments:	21	0	24
<b>Total Hours Required:</b>	<b>63</b>	<b>18</b>	<b>63</b>

## Summary of Requirements for Major/Minor in Computer Science

Major	Minor
<b>1. Core Courses:</b> <i>(18 hours)</i> COSC 100/110 Intro. to Computer Science COSC 200 Computer Science I COSC 201 Computer Science II COSC 305 Computer Ethics COSC 325 Software Engineering COSC 365 Digital Logic & Computer Design	
<b>2. Required Advanced Courses:</b> <i>(12 hours)</i> COSC 310 Data Structures & File Organization COSC 450 Programming Language Structures COSC 460 Operating Systems Concepts COSC 470 Compiler Designs and Constructions	
<b>3. Other Required Courses:</b> <b>Mathematics</b> <i>(15 hours)</i> MATH 200 An Introduction to Discrete Math MATH 226, 227 Calculus I, II <i>(226 - GEP BR Math)</i> MATH 380 Introduction to Probability & Statistics <i>One additional math course at the 300 or 400 level <b>except:</b></i> MATH 340 Fundamental Concepts of Geometry <i>or</i> MATH 461 History of Mathematics <b>Other</b> <i>(6 hours)</i> CMST 102 Introduction to Human Communication ENGL 338 Technical Writing <i>(GEP BR Adv. Comp.)</i>	
<b>4. Electives:</b> <i>(12 hours)</i> <i>Four additional computer science courses from:</i> COSC 335 Network Architecture Design COSC 345 The Internet and Multimedia Communications COSC 350 Computer Organization & Assembly Language COSC 390 Topics in Modern Programming Languages COSC 415 Computer Interfacing COSC 420 Robotics and Industrial Computer Applications COSC 430 Computer Education COSC 435 Network Implementation and Testing COSC 440 Database Management Systems COSC 445 Network and Distributed System Management COSC 455 Artificial Intelligence COSC 465 Computer Systems Architecture COSC 475 Interactive Computer Graphics COSC 485 Theory of Computation COSC 491 Seminar in Computer Science COSC 494 Field Exp. in Computer/Information Science COSC 499 Individual Problems in Computer Science	
<i>(9 hours)</i> <i>Three additional computer science courses.</i> <i>Two must be at the 300-level or above.</i>	

## Requirements for Major Concentrating in Information Systems

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### 1. Core Courses:

*(18 hours)*

COSC 100/110 Intro. to Computer Science  
 COSC 200 Computer Science I  
 COSC 201 Computer Science II  
 COSC 305 Computer Ethics  
 COSC 325 Software Engineering  
 COSC 365 Digital Logic and Computer Design

### 2. Required Advanced Courses:

*(12 hours)*

COSC 300 Structured System Analysis and Design  
 COSC 335 Network Architecture Design  
 COSC 440 Database Management Systems  
 COSC 460 Operating Systems Concepts

### 3. Other Required Courses:

#### **Mathematics** *(9 hours)*

MATH 200 An Introduction to Discrete Math  
 MATH 220 Calculus for Applications  
*or* MATH 226 Calculus I *(GEP BR Math)*  
 MATH 209/219 Elements of Applied Probability & Statistics *(GEP BR Math)*  
*or* MATH 380 Intro. to Probability & Statistics

#### **Other** *(12 hours)*

ENGL 338 Technical Writing *(GEP BR Adv. Comp.)*  
 ACCT 201, 202 Introductory Accounting I and II  
 CMST 102 Introduction to Human Communication

### 4. Electives:

*(9 hours)*

*Three additional computer science courses from:*

COSC 320 Business Programming  
 COSC 345 The Internet and Multimedia Communications  
 COSC 350 Computer Organization and Assembly Language  
 COSC 380 Computer-Based Information Systems  
 COSC 390 Topics in Modern Programming Languages  
 COSC 410 Data and Computer Communication  
 COSC 415 Computer Interfacing  
 COSC 420 Robotics and Industrial Computer Applications  
 COSC 430 Computer Education  
 COSC 435 Network Implementation and Testing  
 COSC 445 Network and Distributed System Management  
 COSC 455 Artificial Intelligence  
 COSC 465 Computer Systems Architecture  
 COSC 475 Interactive Graphics  
 COSC 480 Knowledge-Based Systems  
 COSC 485 Theory of Computation  
 COSC 491 Seminar in Computer Science  
 COSC 494 Field Experience in Computer/Information Science  
 COSC 499 Individual Problems in Computer Science

### 5. Elective in Business

*(3 hours)*

*Any 300- or 400-level course in Business Administration*

# Computer Science

## Certificates

**computing technology  
software development  
programming  
networking**

### Professors:

Chitsaz, Tracy

### Associate Professors:

Owens (Chair), Rinard,  
Slemmer

### Assistant Professors:

Crall, Kranz, Thiel

The four computer science certificates offer learning opportunities to a range of students, from computing novices to computing professionals. Interested students might include:

- degree-seeking undergraduates in any major who wish to develop computing skills beyond those required in their degree program. The certificate represents a credential that may enhance career opportunities in any field.
- non-degree-seeking students who wish to develop computing and technical skills to increase opportunities for employment.
- bachelor's degree holders and professionals in the field looking for career enhancement or change.

## Computing Technology

- A course of study for a learner with little or no computing experience looking to develop a solid skill set in computing basics.

*(12 hours)*

COSC 100/110 Introduction to Computer Science *(You may test out of 100/110)*

COSC 120 Introduction to Cyberspace

COSC 130 Introduction to Programming

COSC 220 Introduction to Software Applications

## Software Development

- A study of programming fundamentals and software development methods for a student with basic computing skills.

*(12 hours)*

COSC 200 Computer Science I *(COSC 130 or instructor's permission is prerequisite for COSC 200)*

COSC 201 Computer Science II

COSC 300 Systems Analysis and Design

COSC 325 Software Engineering

## Programming

- A study sequence for students with basic computing skills that provides a foundation in computer programming fundamentals and working expertise in an object-oriented programming language.

*(12 hours)*

COSC 130 Introduction to Programming

COSC 200 Computer Science I

COSC 201 Computer Science II

*And one of the following:*

COSC 310 Data Structures & File Organization

COSC 390 Topics in Modern Programming Languages

## Networking

- A study sequence for students with programming experience wishing to develop expertise in network theory, design, and application. Permission of department chair required.

*(15 hours)*

COSC 201 Computer Science II *(COSC 200 is a prerequisite. You may test out of COSC 200)*

COSC 335 Network Architecture and Design

COSC 365 Digital Logic and Computer Design

COSC 435 Network Implementation and Testing

COSC 445 Network and Distributed System Management

# Dance

	For Major	For Minor
Hours Required in Dance:	48	23
Hours Required in Other Departments:	15	2-3
<b>Total Hours Required:</b>	<b>63</b>	<b>25-26</b>

## Major

## Minor

### Coordinator:

Claudia Palumbo,  
Instructor, Dance,  
Division of Performing Arts

### Associate Professor:

Fischer

- You are required to participate in either the annual Fall or Spring Dance Concert.
- You may not receive credit for both a DANC course and the same course formerly labelled PHEC.

## Summary of Requirements for Major/Minor in Dance

Major	Minor
<p><b>1. Courses in Dance Technique:</b> <i>(20 hours)</i> <i>16 hours in Modern Dance Technique from among:</i> DANC 142 Modern I DANC 242 Modern II DANC 342 Modern III DANC 442 Modern IV <i>(repeated at least 3 times for credit)</i></p> <p><i>4 hours in Ballet Technique from among:</i> DANC 231 Ballet II DANC 332 Ballet III <i>(may be repeated for credit)</i></p> <p><b>2. Courses in Dance Composition and Theory</b> <i>(28 hours)</i> DANC 105 Improvisation DANC 110 Dance Appreciation <i>(GEP LAC Group A)</i> DANC 209 Dance Composition I DANC 309 Dance Composition II DANC 360 Repertory DANC 382 Dance History DANC 408 Choreography and Production DANC 429 Special Topics in Dance <i>(minimum of 6 credits required)</i> DANC 471 Principles of Teaching Dance DANC 479 Teaching Practicum DANC 498 Senior Project</p> <p><b>3. Required Courses in Other Departments</b> <i>(15 hours)</i> MUSC 101 Music Fundamentals BIOL 211 Essentials of Anatomy and Physiology THEA 110 Introduction to Acting THEA 306 Stage Lighting RECR 384 Special Events Management</p>	<p><i>(13 hours)</i> DANC 131 Ballet I DANC 142 Modern I DANC 154 Jazz I DANC 231 Ballet II DANC 242 Modern II DANC 254 Jazz II DANC 342 Modern III</p> <p><i>(10 hours)</i> DANC 110 Dance Appreciation <i>(GEP LAC Group A)</i> DANC 408 Choreography &amp; Production DANC 429 Special Topics in Dance <i>(4 credits required)</i></p> <p><i>(2-3 hours from among)</i> MUSC 101 Music Fundamentals THEA 104 Theatre THEA 107 Intro. to Theatrical Vision <i>(GEP LAC Group A)</i> ART 104 Foundational Studies I</p>

# Dental Hygiene Preparation

## Pre-professional program

### Coordinator:

David Morton, Chair,  
Department of Biology

- The listed pre-professional courses are required for students interested in attending the University of Maryland, Baltimore's Dental Hygiene Program. These courses could also be taken, together with additional requirements, by students interested in attending other programs in Dental Hygiene.
- It is expected that each student enrolled in the Pre-Dental Hygiene Program will earn and maintain a **minimum 3.0** cumulative grade point average and a 3.0 cumulative grade point average in biology, chemistry, and nutrition to be considered competitive for the program.
- You cannot major or minor in Dental Hygiene Preparation.

For Pre-professional Program

Total Hours:

62

## Summary of Requirements for Pre-professional Program in Dental Hygiene Preparation

### 1. Biology

(16 hours)

BIOL 149 General Biology I  
BIOL 201 Anatomy & Physiology I  
BIOL 202 Anatomy & Physiology II  
BIOL 304 Microbiology

### 2. Chemistry

(13 hours)

CHEM 101 General Chemistry I  
CHEM 102 General Chemistry II  
CHEM 301 Organic Chemistry I

### 3. English

(6 hours)

ENGL 101/111 Freshman Composition  
ENGL 310 Advanced Composition  
*or* ENGL 338 Technical Writing  
*or* ENGL 339 Scientific Writing

### 4. Communication Studies

(3 hours)

CMST 102 Intro. to Human Communication

### 5. Sociology

(3 hours)

SOCI 100/111 Intro. to Sociology

### 6. Math

(3 hours)

MATH 209 Elements of Applied Probability & Statistics

### 7. Health

(3 hours)

HEED 200 Nutrition

### 8. Psychology

(3 hours)

PSYC 150/151 General Psychology

### 9. Humanities

(6 hours)

*Courses must be selected from two different areas:* English (literature), philosophy, mathematics, foreign language, history, and music/art (appreciation or history)

*Some suggested courses:*

MATH 102, 103  
PHIL 102, 313  
MUSC 110, 117  
ENGL 150/250, 260, 261, 290

### 10. Social Science

(6 hours)

*Courses may be selected from the following areas:* psychology, sociology, economics, business administration, geography, political science, and computer science.

# Earth Science

## Major

**Concentration in:  
environmental science**

**Teaching Certification  
Option**

**Coordinator:**  
Tom Small, Professor and  
Chair, Department of  
Geography

**Participating Faculty:  
Professors:**

Barry, Yoder (Biology),  
Caupp, Precht, Small  
(Geography)

**Associate Professors:**  
G. Brewer (Biology), Doyle  
(Physics), Tam (Physics)

**Assistant Professors:**  
Bowe, Kutay, Pegg  
(Biology), Kessler, Neave,  
Xu (Geography)

- This is a multidisciplinary program jointly administered by the Departments of Geography, Physics, Biology and Chemistry.
- An optional internship is available in Earth Science.
- You may pursue Earth Science middle/secondary teacher certification. Contact the Chair of the Educational Professions Department.
- There is no minor in Earth Science.
- The discipline and/or education requirements for teaching certification may change as a result of NCATE program review requirements, or state or federal action. If you are interested in the teaching certification option, you should stay in close contact with the Department Chair or Coordinator and with the Department of Education Professions. It is to your advantage to complete an NCATE-approved program.

	For Major	For Environmental Science Concentration	Teaching Cert. Option
Hours Required in Geography:	27-33	37-49	30
Hours Required in Other Fields:	11-17	31-34	59.5
<b>Total Hours Required:</b>	<b>44</b>	<b>71-83</b>	<b>89.5</b>

## Summary of Requirements for Major in Earth Science

### 1. Introductory Level Courses:

(7 hours)

GEOG 103 or 113 Physical Geography (*GEP LAC Group C*)

GEOG 275 Introduction to Spatial Analysis

### 2. Required Advanced Courses:

(26 hours)

GEOG 307 Advanced Physical Geology

GEOG 308 Advanced Historical Geology

GEOG 310 Fundamentals in the Mapping Sciences

GEOG 335 (or SCIE 335) Oceanography or GEOG 440 Introduction to Soils\*

GEOG 380 Research Methods and Field Techniques

GEOG 430 or 431 Fluvial or Glacial and Pleistocene Geomorphology\*

MATH 209 Elements of Applied Probability and Statistics (*GEP BR Math*)

PHSC 205 Descriptive Meteorology or GEOG 405 Climatology\*

### 3. Required Supporting Science Sequence:

(8 hours)

*Complete one of the supporting Science Sequences:*

BIOL 149-150 General Biology (*149-GEP LAC Group C*)

CHEM 101-102 General Chemistry (*101-GEP LAC Group C*)

PHYS 215-216 General Physics I and II (*215-GEP LAC Group C*)

PHYS 261-262 Principles of Physics I and II (*261-GEP LAC Group C*)

### 4. Elective:

(3-6 hours)

*Select at least one of the following courses (two for teaching certification)\*\**

BIOL 305 Dendrology

BIOL 314 Plant Taxonomy

BIOL 340 Ecology

BIOL 411 Invertebrate Zoology

BIOL 426 Vertebrate Zoology

GEOG 406 Conservation of Natural Resources

GEOG 413 Remote Sensing—Aerial Photo Interpretation

GEOG 432 Hydrology

GEOG 441 Soil Analysis

GEOG 445 Biogeography

GEOG 460 Natural Hazards in the Physical Environment

PHSC 210 Descriptive Astronomy

PHSC 220 The Solar System

*\*Courses not selected to meet requirements, may be used as electives.*

*\*\*Some of these courses may require additional prerequisite course work.*

## Summary of Requirements for Teaching Certification Option in Earth Science

If you wish to complete a Maryland State approved program in teaching Earth Science, you must:

- Complete the BA/BS in Earth Science (without a concentration).
- Meet the phase admissions requirements summarized in the Educational Professions section.
- Complete the professional education sequence described in Education: Secondary School Programs.
- Select the following courses to complete your major: PHSC 205, PHSC 210 or PHSC 220, GEOG/SCIE 335, and GEOG 406 or GEOG 460.

- The Environmental Science concentration is dedicated to the study of the relationships between humans and their environments.
- You will become sensitive, articulate, and knowledgeable about increasingly complex environmental issues facing contemporary society.
- Course work in this concentration will provide the theoretical and practical background as well as the skills necessary to study environmental science from a wide range of perspectives.
- You must meet certain criteria and deadlines prior to enrollment in either GEOG 488 or GEOG 492.
- You must select 2 other members for your advisory committee in addition to your advisor from the faculty in participating departments. At least 1 member of the committee must be from Geography.

## Summary of Requirements for Environmental Science Concentration in Earth Science

### 1. Introductory Level Courses:

(16 hours)

GEOG 103 *or* GEOG 113 Physical Geography (GEP LAC Group C)

GEOG 104 Human Geography (GEP LAC Group D)

GEOG 275 Introduction to Spatial Analysis

MATH 102 College Algebra (GEP BR Math)

MATH 209 Elements of Probability and Statistics (GEP BR Math)

### 2. Required Advanced Courses:

(15 hours)

GEOG 380 Geographic Research Methods and Field Techniques

GEOG 406 Conservation of Natural Resources

GEOG 445 Biogeography

GEOG 472 Environmental Planning *or* GEOG 473 Environmental Law

GEOG 488 Environmental Practicum *or* GEOG 492 Internship: Research in Geography\*

*\*requires co-registration in GEOG 495*

### 3. Required Supporting Science Sequence:

(16 hours)

BIOL 149 General Biology I (GEP LAC Group C)

BIOL 150 General Biology II

CHEM 101 General Chemistry I (GEP LAC Group C)

CHEM 102 General Chemistry II

### 4. Electives:

(24 hours)

*Select two courses in each group.\*\**

#### Group I Advanced Biology

BIOL 314 Plant Taxonomy *or* BIOL 305 Dendrology

BIOL 340 General Ecology

BIOL 406 Ornithology

BIOL 421 Sample Design and Analysis of Plant Communities

BIOL 422 Herpetology

BIOL 423 Mammalogy

BIOL 430 Introductory Limnology

#### Group II Advanced Techniques

GEOG 301 Fundamentals in the Mapping Sciences

GEOG 317 Geographic Information Systems

GEOG 413 Remote Sensing - Air Photo Interpretation

GEOG 414 Advanced Remote Sensing Techniques

GEOG 433 Surveying

#### GROUP III Advanced Physical Geography

GEOG 335 Oceanography

GEOG 405 Climatology

GEOG 430 Fluvial Geomorphology

GEOG 431 Glacial & Pleistocene Geomorphology

GEOG 432 Hydrology

GEOG 440 Introduction to Soils

GEOG 460 Natural Hazards in the Physical Environment

#### GROUP IV Advanced Human Systems

*Take two of the following from two different disciplines:*

ECON 410 Resource and Environmental Economics

ENGL 440 Literature of the Environment

GEOG 300 Economic Geography

GEOG 407 Political Geography

GEOG 410 Locational Analysis

HIST 309 World Environmental History

PHIL 315 Philosophy and the Environment

POSC 450 Environmental Public Policy

*\*\*some of these courses may require additional prerequisite course work.*

# Economics

	For Major	For Minor
Hours Required in Economics:	30-33	18
Hours Required in Other Departments:	6-21	6
<b>Total Hours Required:</b>	<b>39-51</b>	<b>24</b>

## Major and minor

### Tracks in general economics business economics

Professors:  
Dalton, Mizak, Neral  
Associate Professor:  
Stair (Chair)  
Assistant Professors:  
Kiriazis, Rossi

- This discipline establishes a logical framework of reasoned analysis that can be applied to issues in social science, natural science and business.

## Summary of Requirements for Major/Minor in Economics

Major	Minor
<b>1. Core Introductory Level Courses:</b>	
<i>(6 hours)</i>	<i>(6 hours)</i>
ECON 201* Principles of Econ. (Macro) <i>(GEP LAC Group D)</i>	ECON 201* Principles of Econ. (Macro) <i>(GEP LAC Group D)</i>
ECON 202* Principles of Econ. (Micro)	ECON 202* Principles of Econ. (Micro)
<b>2. Core Advanced Economics Courses:</b>	
<i>(18 hours)</i>	<i>(6 hours)</i>
ECON 351* Intermediate Macro-Economics	ECON 351* Intermediate Macro-Economics
ECON 352* Intermediate Micro-Economics	ECON 352* Intermediate Micro-Economics
ECON 491* Seminar in Economics <i>plus 9 elective hours in Economics (excluding ECON 495)</i>	
<b>3. Choice of Track:</b>	
<i>(9-21 hours)</i>	<i>(6 hours)</i>
<i>Majors must choose a track in General Economics or Business Economics. (Requirements listed below)</i>	<i>From among upper-division courses (excluding ECON 495)</i>
<b>4. Required Core Courses in Other Departments:</b>	
<b>Mathematics:</b> <i>(6 hours)</i>	<i>(6 hours)</i>
MATH 209* Elements of Applied Probability and Statistics <i>(GEP BR Math)</i>	MATH 209* Elements of Applied Probability and Statistics <i>(GEP BR Math)</i>
MATH 226* Calculus I <i>(GEP BR Math)</i> <i>or</i> MATH 220* Calculus for Applications <i>or</i> MATH 106* Algebra with Calculus for Business <i>and</i> ECON 450 Quantitative Economics+	MATH 226* Calculus I <i>(GEP BR Math)</i> <i>or</i> MATH 220* Calculus for Applications <i>or</i> MATH 106* Algebra with Calculus for Business

## Requirements for the General Economics Track

- 1. Core Courses:** *(30 hours)*  
Required of all Economics majors; listed above.
- 2. Advanced Economics Courses:** *(9 hours)*  
ECON 300\* History of Economic Thought  
*Students must complete 6 elective credit hours in Economics at the 400 level.*

## Requirements for the Business Economics Track

- 1. Core Courses:** *(30 hours)*  
Required of all Economics majors; listed above.
- 2. Advanced Economics Courses:** *(6 hours)*  
ECON 400 International Trade  
*or* ECON 401 International Finance  
*and* ECON 407 Business Cycles and Forecasting  
*or* ECON 460 Econometrics
- 3. Courses in Other Departments:** *(15 hours)*  
BUAD 351\* Management of Organizations  
*and* BUAD 361\* Principles of Marketing  
*and* BUAD 320 Microcomputer Applications in Business  
*and* BUAD 370 Corporate Finance  
ACCT 100\* Financial Accounting  
*or* ACCT 201\* Introductory Accounting I

*+Note: If this option is selected, ECON 450 may not be used to satisfy an Economics elective*

*\* Note: You must receive a grade of C or better for this course to count toward the major/minor.*

# Educational Professions

## Professors:

Alexander, Arisman, Azzi, Bingman, Dow, Fell, Malak, T. Palardy

## Associate Professors:

Biermann, Cushall, Fetter (Chair), Finan, Wakefield (Associate Chair), Wheaton, Witmer

## Assistant Professors:

Belt-Beyan, Crawford, Donohoe, Golden, Holmes, Ornstein, Schweiker-Marra, O. Simmons, Snyder

## Instructors:

Boayue, M. Palardy, S. Pack, Rotruck

- You may elect to major in one of two areas: Early Childhood/Elementary Education or Elementary Education.
- All elementary majors are required to have an area of specialization.
- Professional education sequences for secondary and K-12 programs are provided in cooperation with other departments (see separate sections of this catalog).
- You cannot minor in education.
- An internship is required.
- You must complete application for each phase of the program. The requirements for entry in phases are described in this section.
- Further information is available in the Undergraduate Teacher Education Handbook available in Framptom Hall 220.

## Teacher Education Programs

The Educational Professions Department offers an Early Childhood/Elementary major leading to eligibility for certification in nursery school through grade 6 and middle school, an Elementary Education major leading to eligibility for certification in grades 1-6 and middle school, and a Business Education major leading to certification in grades 7-12 (*see separate catalog listing for Business Education information*).

The Educational Professions Department also offers approved teacher education programs leading to eligibility for certification in Secondary Education (biology, business education, chemistry, English, foreign languages - French and Spanish, earth science, mathematics, physics, social studies), for grades 7-12 as well as middle school depending on subject area, and K-12 Education (art, music, health and physical education) for grades kindergarten-12. Requirements for these majors and programs are listed in the catalog under Education: Early Childhood/Elementary Program, Elementary Program, Secondary School Programs, K-12 Programs and departments offering the areas of content specialization.

The teacher education programs are committed to preparing professionals who are able to provide quality instruction, service, and leadership in a global community. The conceptual framework upon which each program rests focuses on the knowledge, skills and dispositions needed to develop powerful learning communities. The university, the public schools, parents and other community members link together using their hands, heads and hearts to prepare the finest pre-service teacher candidates. Educational Professions' graduates are expected to be dedicated professionals, instructional leaders, continuous assessors, educational advocates, collaborative bridge-builders and reflective decision-makers.

## Eligibility for Teacher Certification in Maryland

For eligibility for certification in the Early Childhood/Elementary program or the Elementary program, candidates must complete the approved program requirements as listed, university graduation requirements and Praxis testing requirements. Passing Praxis II, demonstrating the knowledge and skills of a specialized content area at the Maryland State Department of Education prescribed score, represents one qualification for completing the degree in teacher education or gaining teacher certification. Accordingly, candidates must pass Praxis II to become program completers and to graduate in an approved teacher education program. Completion of K-12 teacher education programs and the secondary professional sequence requires passing Praxis II to be eligible and endorsed for certification.

Candidates may apply for a certificate of eligibility directly to the Maryland State Department of Education or may apply for a Standard Professional Certificate I through the personnel office of a county offering employment.

## Eligibility for Teacher Certification in Other States

If candidates wish to gain a teaching license in a state other than Maryland, candidates need to check the certification requirements in the state(s) for the program in which they wish to teach, including the passing standard for Praxis in that state. Having a Maryland certificate of eligibility may prove helpful in the out-of-state certification effort.

## Approved Program

Since Maryland State Department of Education has approved FSU's teacher education programs, the Department of Educational Professions authorizes the Registrar's Office to affix an approved program stamp on your official transcript.

## Special Admission Criteria

In addition to the requirements set forth in the summaries of requirements for majors in Early Childhood/Elementary and Elementary Education, the Professional Education Sequences for Secondary Programs, and K-12 Programs (found in separate sections of this catalog), applicants must meet the following phase admission requirements in order to be accepted into and complete an education program. Application deadlines for Phase I and Phase II for all candidates, including transfers, are established in October for spring semester and in May for fall semester by the Office of Unit Assessment. The application deadline for Phase III is established by the Office of Field Experience.

## Accreditation

Teacher Education Programs are undergoing changes to meet NCATE (National Council for Accreditation of Teacher Education) and state standards. Check with the Educational Professions Department for current information. Substitutions within education programs may be made by the Educational Professions Department to update the education programs to meet national and state standards and directives. Discipline requirements in the major or specialization also may change.

**Pre-Phase Requirement**

1. EDUC 100 students are required to be certified free of TB prior to fieldwork.

**Phase I Admission Requirements (Program Entrance)**

1. Completion of at least 45 credit hours.
2. Cumulative GPA of at least 2.5 (including all grades from transfer institutions).
3. Passing grade on PRAXIS I as established by the state of Maryland.
4. C or above in ENGL 101/111.
5. Twenty (20) documented hours of working with diverse populations.\*
6. Declaration of a major. Transfer students must indicate intended major at transfer institutions.
7. Successful completion of technology inventory.\*
8. Certified free of TB.
9. Completion of consent and release form. \*\*

**Additional Phase I Requirements for Early Childhood/Elementary and Elementary Education Majors**

1. C or above in MATH 206.
2. Grade of C or above in EDUC 100.
3. Declaration of specialization.

**Additional Phase I Requirements for Secondary and K-12 Majors**

1. C or above in the basic math requirement.
2. Grade of C or above in EDUC 100 (Secondary only).

**Phase II Admission Requirements**

1. Completion of at least 60 credit hours (Junior standing).
2. Cumulative GPA of at least 2.5 (including final grade point averages from transfer institutions).
3. C or better in each of the Phase I courses designated by program.
4. Cumulative GPA of 2.5 in each of the Phase I courses designated by program.
5. GPA of 2.5 in major (K-12/secondary only).
6. Grade of P in EDUC 200.
7. Grade of C or better in ENGL 308 or equivalent.
8. Completion of at least one course in each of groups A,B,C and D of the Liberal Arts Component of the GEP.
9. Positive recommendation of advisor.
10. Seventy-five percent or 18 credits of content major or specialization completed with study plan submitted to the Office of Unit Assessment.
11. Grade of C or better in MATH 207 (ECE/ELEM and ELEM majors).

**Admission Requirements for Professional Development Schools**

1. Successful completion of EDUC 307 (field work). (ECE/ELEM and ELEM majors)
2. Cumulative GPA of at least 2.5.
3. GPA of 2.5 in major with no grade less than C in Block I courses.
4. Successful completion of a collaborative entrance interview into a PDS.

**Phase III Admission Requirements**

1. Completion of at least 90 credit hours (senior standing).
2. Cumulative GPA of at least 2.60.
3. GPA of at least 2.75 in all required education courses.

\* According to departmental format.

\*\*Confirming that candidate is free of convictions that would disqualify him/her from obtaining certification in Maryland.

4. GPA of at least 2.75 in content major or area of specialization.
5. Grade of C or better in each Phase II course.
6. Successful completion of Phase II field work.
7. Approval of Coordinator of Field Experiences.

### Program Exit Requirements

1. Successful presentation of a portfolio that meets standards.
2. Passing score on PRAXIS II as established by the state of Maryland.

## Education: Early Childhood/ Elementary Program

### Major

#### Professors:

Alexander, Azzi, Bingman,  
Dow, Fell, T. Palardy

#### Associate Professors:

Cushall, Finan, Wakefield,  
Wheaton, Witmer

#### Assistant Professors:

Belt-Beyan, Holmes,  
Ornstein, Schweiker-Marra,  
O. Simmons, Snyder

#### Instructors:

Boayue, M. Palardy, S.  
Pack, Rotruck

- The requirements in numbers 1-4 list specific hours required in other departments. These requirements include but go beyond the University GEP.
- You must complete the 24 hour early childhood specialization.
- You must complete application for each phase of the program.
- The requirements for entry into phases are listed in the Educational Professions section of this catalog.
- Consider a double major in Liberal Studies (see the major description in this catalog).

	For Major
Hours Required in Education:	72
Hours Required in Other Departments:	59
<b>Total Hours Required:</b>	<b>131</b>

### Summary of Requirements for Major in Early Childhood/Elementary Education

Directed academic course requirements within and beyond the University GEP

#### Major

#### 1. Completion of Basic Requirements: (11 hours)

*Early Childhood/Elementary Education Majors should choose MATH 207 for BR.*

#### 2. Specific Hours for Early Childhood/Elementary Education Majors: (27 hours)

##### **Fine Arts Component** (3 hours; satisfies GEP)

ART 110 Visual Imagery

##### **English (Literature)** (3 hours; satisfies GEP)

ENGL 150/250 or MDFL 150 Intro. to Literature

##### **History** (3 hours; satisfies GEP)

HIST 100/111 The Contemporary World in Historical Perspective

##### **Mathematics** (9 hours; 3 satisfy BR)

MATH 206 Problem Solving for Elementary Teachers I

MATH 207 Problem Solving for Elementary Teachers II

MATH 209 Elements of Applied Probability and Statistics

*or* MATH 102 College Algebra

##### **Natural Science** (12 hours; at least 8 satisfy GEP)

a. BIOL 109 Human Biology and the Environment or BIOL 149 General Biology I

b. PHYS 203 Physical Science

c. 4 hour lab science elective - GEP recommended

##### **Social Science** (3 hours; satisfies GEP)

GEOG 104 Human Geography

#### 3. Additional GEP Requirements: (9 hours)

a. SOSC (3 hours minimum - see GEP) (Check specialization for GEP possibilities).

b. Liberal Arts Component electives (6 hours).

*Select a minimum of six additional GEP credits. See GEP. 4 credits can be satisfied by selecting a GEP science course for the third science course required for Early Childhood/Elementary and Elementary majors. In that event, one 3-credit GEP course will still be required. (Check specialization for GEP possibilities).*

#### 4. Professional Education Courses Required Prior to Entrance to Phase III: (6 hours)

MUSC 350 Music and Creative Interaction for the Elementary Classroom (3)

PHEC 309 Health and Physical Education for the Elementary Classroom (3)

#### 5. Specialization (24 hours; 2 courses satisfy GEP)

a. ART 110 Visual Imagery (3 hours satisfy GEP)

b. SOCI 100/111 Intro to Sociology *or* PSYC 150/151 General Psychology (3 hours satisfy GEP)

- c. *One course from the following:*  
 PSYC 210 Child Development  
 SOCI 200 Social Problems  
 SOWK 370 Intro to Social Welfare
- d. Diversity Course — *One course from the following:*  
 Spanish or French course (*100-level or above*)  
 ENGL 418 Second Language Acquisition: Theory and Application  
 ENGL 290 Topics in Language and Literature (*requires advisor approval*)  
 HIST 301 Traditional Africa  
 HIST 341 Modern and Contemporary Middle East  
 HIST 450 History of Mexico  
 HIST 459 History of Japan  
 HIST 460 Modern and Contemporary Asia  
 SOCI/SOWK 305 Racial and Cultural Minorities  
 SOCI/SOWK 306 The Sociology of African Americans  
 SOCI 224 Cultural Anthropology  
 ART 301 Artistic Traditions: Asia  
 ART 302 Artistic Tradition: Africa and the Americas
- e. *All of the following (12 hours)*  
 ECED 150 Early Childhood Foundations (*taken Pre-Phase I or during Phase I*)  
 ECED 293 Early Childhood Learning Environment (*taken during Phase I*)  
 ECED 431 Early Childhood Education I: Curriculum Development & Implementation (*taken during Block I*)  
 ECED 443 Early Childhood Education II: Adults in the Child's World (*taken during Block II*)

**6. Professional Education Courses Required Prior to or Concurrent with Phase I: (4 hrs.)**

- See course descriptions.  
 EDUC 100 Career Analysis in Education (1)  
 EDUC 201 Students, Teachers, and Learning Environments (3)

**7. Professional Education Sequence: (56 hours)**

**PHASE I (11 hours)**

- EDUC 202 Foundations of Learning and Instruction (3)  
 EDUC 200 Phase I Teaching and Professional Assessment Laboratory (1)  
 REED 323 Process and Acquisition of Reading (3)  
 EDUC 346 Educational Technology Laboratory I (1)  
 EDUC 376 Special and Multicultural Education (3)

**PHASE II, Block 1 (14 hours)**

- ELED 471 Mathematics Curriculum & Methods: Integrated Block (2)  
 ELED 472 Language Arts Curriculum & Methods: Integrated Block (2)  
 ELED 474 Science Curriculum & Methods: Integrated Block (2)  
 ELED 475 Social Studies Curriculum & Methods: Integrated Block (2)  
 REED 473 Reading Instruction (3)  
 EDUC 447 Educational Technology Laboratory II (1)  
 ELED 307 Block 1 Clinical and Professional Assessment Component (2)

**PHASE II, Block 2 (14 hours)**

- EDUC 403 Assessment and Management of Learning (4)  
 EDUC 448 Educational Technology Laboratory III (1)  
 REED 425 Materials and Motivations for Reading (3)  
 ELED 494 Teaching Internship I: N-8 (6)

**PHASE III (17 hours)**

- EDUC 405 Leadership (2)  
 REED 420 Assessment for Reading Instruction (3)  
 ELED 495 Teaching Internship II: N-8 (12)

**8. Other Graduation/Program Exit Requirements**

- a. Successful presentation of a portfolio that meets standards.
- b. Passing score on Praxis II as established by the state of Maryland.

## Education: Elementary Program

	For Major
Hours Required in Education:	60
Hours Required in Other Departments:	71
<b>Total Hours Required:</b>	<b>131</b>

### Major

#### Professors:

Alexander, Azzi, Bingman,  
Dow, Fell, T. Palardy

#### Associate Professors:

Cushall, Finan, Wakefield  
(Associate Chair), Wheaton,  
Witmer

#### Assistant Professors:

Belt-Beyan, Holmes,  
Ornstein, Schweiker-Marra,  
O. Simmons, Snyder

#### Instructors:

Boayue, M. Palardy, S.  
Pack, Rotruck

- The requirements in numbers 1-3 at right list specific hours required in other departments. These requirements include but go beyond the University GEP.
- You must complete an approved 24 hour specialization.
- You must complete application for each phase of the program.
- The requirements for entry into phases are described in the Educational Professions section of this catalog.
- Consider a double major in Liberal Studies (see the major description in this catalog).

### Summary of Requirements for Major in Elementary Education

Directed academic course requirements within and beyond the University GEP

#### Major

#### 1. Completion of Basic Requirements: (11 hours)

*Elementary Education Majors should choose MATH 207 for BR.*

#### 2. Specific Hours for Elementary Education Majors: (27 hours)

##### **Fine Arts Component** (3 hours; satisfies GEP)

ART 110 Visual Imagery

##### **English (Literature)** (3 hours; satisfies GEP)

ENGL 150/250 or MDFL 150 Intro. to Literature

##### **History** (3 hours; satisfies GEP)

HIST 100/111 The Contemporary World in Historical Perspective

##### **Mathematics** (9 hours; 3 satisfy BR)

MATH 206 Problem Solving for Elementary Teachers I

MATH 207 Problem Solving for Elementary Teachers II

MATH 209 Elements of Applied Probability and Statistics

or MATH 102 College Algebra

##### **Natural Science** (12 hours; at least 8 satisfy GEP)

a. BIOL 109 Human Biology and the Environment or BIOL 149 General Biology I

b. PHYS 203 Physical Science

c. 4 hour lab science elective - *GEP recommended*

##### **Social Science** (3 hours; satisfies GEP)

GEOG 104 Human Geography

#### 3. Additional GEP Requirements: (9 hours)

a. SOCS (3 hours minimum — see GEP)

b. Liberal Arts Component electives (6 hours). *Select a minimum of six additional GEP credits. See GEP. 4 credits can be satisfied by selecting a GEP science course for the third science course required for Early Childhood/elementary and Elementary majors. In that event, one 3-credit GEP course will still be required. (Check specialization for GEP possibilities)*

#### 4. Professional Education Courses Required Prior to Entrance to Phase III: (6 hours)

MUSC 350 Music and Creative Interaction for the Elementary Classroom (3)

PHEC 309 Health and Physical Education for the Elementary Classroom (3)

#### 5. Specializations (24 hours, 2 courses count for GEP)

A 24 hour specialization must be completed in one of the following areas: Mathematics, General Science, Social Studies, Language Arts, Science/Mathematics, or an Approved Individualized Specialization. Requirements for each specialization are available in the Department of Educational Professions.

#### 6. Professional Education Courses Required Prior to or Concurrent with Phase I: (4 hours)

See course descriptions.

EDUC 100 Career Analysis in Education (1)

EDUC 201 Students, Teachers, and Learning Environments (3)

#### 7. Professional Education Sequence (56 hours)

##### **PHASE I** (11 hours)

EDUC 202 Foundations of Learning and Instruction (3)

EDUC 200 Phase I Teaching and Professional Assessment Laboratory (1)

REED 323 Process and Acquisition of Reading (3)

EDUC 346 Educational Technology Laboratory I (1)

EDUC 376 Special and Multicultural Education (3)

**PHASE II, Block 1** (14 hours)

ELED 471 Mathematics Curriculum & Methods: Integrated Block (2)  
 ELED 472 Language Arts Curriculum & Methods: Integrated Block (2)  
 ELED 474 Science Curriculum & Methods: Integrated Block (2)  
 ELED 475 Social Studies Curriculum & Methods: Integrated Block (2)  
 REED 473 Reading Instruction (3)  
 EDUC 447 Educational Technology Laboratory II (1)  
 ELED 307 Block 1 Clinical and Professional Assessment Component (2)

**PHASE II, Block 2** (14 hours)

EDUC 403 Assessment and Management of Learning (4)  
 EDUC 448 Educational Technology Laboratory III (1)  
 REED 425 Materials and Motivations for Reading (3)  
 ELED 494 Teaching Internship I: N-8 (6)

**PHASE III** (17 hours)

EDUC 405 Leadership (2)  
 REED 420 Assessment for Reading Instruction (3)  
 ELED 495 Teaching Internship II: N-8 (12)

**8. Other Internship Requirements**

a. Students wishing to have an internship placement in a middle school must take EDUC 445 Middle School Curriculum Methods (3 hours) during the semester in which they are enrolled in Phase II Block I.

**9. Other Graduation/Program Exit Requirements**

a. Successful presentation of a portfolio that meets standards.  
 b. Passing score on PRAXIS II as established by the state of Maryland.

**Education:  
K-12 Programs****Teaching Certification****Contact:**

David J. Fell, Professor,  
 Department of Educational  
 Professions

**Professors:**

Alexander, Dow, Fell, C.  
 Hircock

**Associate Professors:**

Cushall, Finan, B. Hircock,  
 Soderberg, Wakefield,  
 Wheaton, Witmer

**Assistant Professors:**

Mills, B. Ornstein,  
 Schweiker-Marra, Truman

**Instructor:**

M. Palardy

- You must complete an application for each phase of the program.
- The requirements for entry into phases are listed in the Educational Professions section of this catalog.
- The courses of study to be

**Professional Education Sequence for K-12 Programs****ART**

**Pre-Phase I** EDUC 201 Students, Teachers, and Learning Environments  
 (3 hours)

**Phase I** EDUC 202 Foundations of Learning & Instruction  
 (7 hours) EDUC 200 Phase I Teaching and Professional Assessment Laboratory  
 REED 317 Content Area Reading

**Phase II** EDUC 309 Art Education Methods for the Elementary Teacher  
 (14.5 hours) EDUC 308 Art Education Methods for the Secondary Teacher  
 EDUC 392 K-12 Field Experience  
 EDUC 300 Phase II Teaching and Professional Assessment Laboratory  
 REED 318 Reading and Writing Connections  
 SPED 361 Adapting Instruction in Diverse Classrooms

**Phase III** EDUC 406 Leadership Seminar  
 (14 hours) EDUC 497 Teaching Internship, K-12 Program

**Program Exit Requirements**

a. Successful presentation of a portfolio that meets standards.  
 b. Passing score on Praxis II as established by the state of Maryland.

**MUSIC**

**Pre-Phase I** EDUC 201 Students, Teachers, and Learning Environments  
 (3 hours)

**Phase I** EDUC 202 Foundations of Learning & Instruction  
 (7 hours) EDUC 200 Phase I Teaching and Professional Assessment Laboratory  
 REED 317 Content Area Reading

**Phase II** MUSC 352 Choral Music Methods  
 (16.5 hours) *or* MUSC 353 Instrumental Music Methods  
 EDUC 354 General Music Methods in Elementary School

followed in academic content areas are established by the individual departments (art, health and physical education, music).

- You cannot major or minor in K-12 education.

EDUC355 General Music Methods in Secondary School  
 EDUC 392 K-12 Field Experience  
 EDUC 300 Phase II Teaching and Professional Assessment Laboratory  
 REED 318 Reading and Writing Connections  
 SPED 361 Adapting Instruction in Diverse Classrooms

**Phase III** EDUC 406 Leadership Seminar  
*(14 hours)* EDUC 497 Teaching Internship, K-12 Program

**Program Exit Requirements**

- Successful presentation of a portfolio that meets standards.
- Passing score on Praxis II as established by the state of Maryland.

**HEALTH & PHYSICAL EDUCATION**

**Pre-Phase I** EDUC100 Career Analysis in Education  
*(4 hours)* EDUC 201 Students, Teachers, and Learning Environments

**Phase I** EDUC 202 Foundations of Learning & Instruction  
*(7 hours)* REED 317 Content Area Reading  
 EDUC 346 Educational Technology Lab I

**Phase II** HEED 404 Health Instruction  
*(14 hours)* PHEC 418 Physical Education in the Secondary School  
 EDUC 392 K-12 Field Experience  
 REED 318 Reading and Writing Connections  
 SPED 361 Adapting Instruction in Diverse Classrooms  
 EDUC 447 Educational Technology Lab II

**Phase III** EDUC 406 Leadership Seminar  
*(15 hours)* EDUC 497 Teaching Internship, K-12 Program  
 EDUC 448 Educational Technology Lab III

**Program Exit Requirements**

- Successful presentation of a portfolio that meets standards.
- Passing score on Praxis II as established by the state of Maryland.

## Education: Secondary Programs

### Teaching Certification

#### Contact:

David J. Fell, Professor,  
Department of Educational  
Professions

#### Professors:

Alexander, Azzi, Dow, Fell,  
K. Parks

#### Associate Professors:

Cushall, Finan, Hurd,  
Larivee, Wakefield,  
Wheaton, Witmer

#### Assistant Professors:

B. Ornstein, Schweiker-  
Marra

#### Instructor:

M. Palardy

- You must complete an application for each phase of the program.
- The requirements for entry into phases are listed in the Educational Professions section of this catalog.
- You cannot major or minor in Education: Secondary Programs

The courses of study to be followed in academic content areas are established by individual departments. You may select the secondary school teaching certification option in addition to completing the major in the following fields:

- biology
- chemistry (teaching certification track)
- English (teaching certification option)
- foreign languages & literature (certification in concentration, French or Spanish)
- earth science
- mathematics
- physics
- social science

If you are majoring in economics, geography, history, political science, social science, or sociology, you are strongly advised to meet Maryland State certification requirements in social studies or have a second major in which you can be assigned for student teaching.

The major in Business Education includes secondary certification requirements as part of the major requirements for all students.

### Professional Education Sequence for Secondary Programs

**Pre-Phase I** EDUC 100 Career Analysis in Education  
(4 hours) EDUC 201 Students, Teachers, and Learning Environments

**Phase I** EDUC 202 Foundations of Learning & Instruction  
(8 hours) EDUC 200 Phase I Teaching and Professional Assessment Laboratory  
REED 317 Content Area Reading  
EDUC 346 Educational Technology Lab I

**Phase II** EDUC 300 Phase II Teaching and Professional Assessment Laboratory  
(15.5 hours) EDUC 391 Secondary Methods Field Experience  
SCED 310 Secondary Methods and Curriculum  
REED 318 Reading and Writing Connections

*One course from among the following:*

SCED 311, 314, 315, 316, 319, or 320 (*content-specific methods courses*).  
SPED 361 Adapting Instruction in Diverse Classrooms  
EDUC 447 Educational Technology Lab II

**Phase III** EDUC 406 Leadership Seminar  
(15 hours) EDUC 497 Teaching Internship, Secondary Education  
EDUC 448 Educational Technology Lab III

### Program Exit Requirements

- a. Successful presentation of a portfolio that meets standards.
- b. Passing score on Praxis II as established by the state of Maryland.

# Engineering

For Pre-professional Program

Total Hours Required at Frostburg State University:

71-82

## Dual-degree Program

### Coordinator:

Oguz Soysal, Chair,  
Department of Physics and  
Engineering

- A dual degree program of Frostburg State University and the University of Maryland, College Park's College of Engineering is available to the student who seeks a career in one of several engineering fields and who also wants a general undergraduate education.

- This program allows you to earn undergraduate degrees from both institutions over a five-year period.

- In this program you attend FSU for approximately three academic years and the University of Maryland, College Park's College of Engineering for approximately two academic years. After completing the academic requirements of FSU — usually at the end of the fourth year (the first year at the University of Maryland, College Park) — you will receive a bachelor's degree from Frostburg State University. Upon meeting all requirements in the Clark School of Engineering, you earn one of several baccalaureate engineering degrees from the University of Maryland, College Park, majoring in any of the following areas:

Aerospace Engineering  
Biological Resources

Engineering

Chemical Engineering

Civil Engineering

Computer Engineering

Electrical Engineering

Engineering Materials

Fire Protection

Materials Engineering

Mechanical Engineering

Nuclear Engineering

## Summary of Requirements at FSU for Dual Degree in Engineering

### 1. Chemistry:

(8-18 hours)

CHEM 101 & 102 General Chemistry I & II (101 - GEP LAC Group C)

\*CHEM 301 & 302 Organic Chemistry I & II

\*Organic chemistry courses required for students in chemical engineering.

### 2. Computer Science:

(3-4 hours)

COSC 200 Computer Science I

or ENEE 114 Programming Concepts for Engineers

### 3. Mathematics:

(18 hours)

MATH 226, 227, 228 Calculus I, II & III (226 - GEP BR Math)

MATH 320 Multivariable Calculus

MATH 420 Advanced Calculus, or MATH 436 Mathematical Physics

MATH 432 Differential Equations

### 4. Engineering:

(3 hours)

ENES 100 Intro to Engineering Design

### 5. Physics:

(39 hours)

PHYS 261 Principles of Physics I (GEP LAC Group C)

PHYS 262 Principles of Physics II

PHYS 263 Principles of Physics III

PHYS 264 Principles of Physics IV

PHYS 310 Classical Mechanics

PHYS 312 Electricity & Magnetism

PHYS 320 Experimental Physics

PHYS 400 Senior Research & Seminar

PHYS 491 Seminar

Choose one track:

(9 hours)

#### a. Traditional Physics

PHYS 417 Quantum Physics

PHYS 311 Thermodynamics

plus one 300-400 level physics elective

#### b. Engineering Physics

With permission of the Department Chair, as many as 6 credits of mechanical or electrical engineering at the 200 level or above may be applied.

*Courses listed in the study program not to be applied toward the student's major field of study may be applied toward satisfaction of the General Education Program requirements where appropriate.*

### Dual Degree Requirements at FSU

1. Completion of required courses in the dual degree study program (listed above), 71-82 semester hours depending on field of engineering.
2. Completion of a minimum of 90 semester hours.
3. Completion of FSU's Basic University Requirements and a modified FSU Liberal Arts Component of the General Education Program (a waiver of Group 5 courses, requiring a total of at least 23 credit hours in the Liberal Arts Component). Students must complete at least six of the additional nine credits of General Education course work required by the University of Maryland, College Park (Advance Studies CORE requirement) to satisfy the General Education requirements at Frostburg State University.
4. Completion of a major program as approved by the respective Frostburg State Department Chair.
5. Recommendation from the designated official at Frostburg State University (Coordinator of the Dual Degree Program in Engineering).

### Requirements for Admission to University of Maryland, College Park

To become a Dual Degree candidate at the University of Maryland, College Park, a student must have satisfied all specified requirements at Frostburg State University. Additionally, the student must have the following:

1. A minimum cumulative 3.0 grade point average at Frostburg;
2. Recommendation from the designated official at Frostburg (Coordinator of the Dual Degree Program in Engineering).

Admission to the College of Engineering of the University of Maryland, College Park is guaranteed to the Frostburg State University Dual Degree student provided the above stated requirements have been satisfied.

# Engineering

For all engineering majors

Minimum GEP Hours Required

43

## Collaborative Programs

### General Education Program for Electrical & Mechanical Engineering Majors

- The mechanical and electrical engineering programs at FSU are offered in collaboration with the Clark School of Engineering, University of Maryland, College Park. The degree awarded to students completing the program is a B.S. from UM,CP. Therefore, students enrolled in the engineering programs must complete UM,CP's general education program requirements.
- UM,CP requires completion of one Human Cultural Diversity course, focusing on one or more of the following: a) the history, status, treatment, or accomplishment of women or minority groups and subcultures; b) non-Western culture; c) concepts and implications of diversity. If you complete either MUSC 110 or DANC 110 under Distributive Studies, both courses would also fulfill your diversity requirement. In addition, there are a number of 300-400 level courses that can be taken to fulfill both the Advanced Studies and Diversity requirement. Please consult with your advisor for a listing of approved courses.
- To be granted advanced placement credit for a course, you must meet UM,CP's minimum requirements. These differ from FSU's standards, with a higher score required by UM,CP in a number of areas. Please consult the Engineering Coordinator to verify AP scores required to receive credit.
- Advanced Studies courses should be taken only after completing 56 credits/entering junior standing.

## Summary of Fundamental Studies Requirements

### 1. English

(6 hours)

ENGL 101/111 Freshman Composition - *must be attempted within first 30 credits & passed within first 60*

ENGL 338 Technical Writing *or* ENGL 339 Scientific Writing - *must be taken after you have completed 56 credits/junior standing*

### 2. Mathematics

(3 hours)

Any MATH 100 *or* 200 level course except MATH 206, MATH 207, MATH 103 and MATH 104. *Must be attempted by 30 credits, completed by 60-credit level.*

MATH 226 Calculus I, *required under the engineering major, fulfills this requirement.*

## Summary of Distributive Studies Requirements

### 1. Arts and Humanities

(9 hours)

ENGL 150/250 *or* MDFL 150 Introduction to Literature *and one History/Theory of the Arts course from the following:*

ART 100/111 Art Appreciation *or* ART 110 Visual Imagery

MUSIC 110 Intro. to World Music

THEA 106 Intro. to Theatre

DANC 110 Dance Appreciation

*One additional Arts and Humanities course (selected from Literature, History/Theory of the Arts, or Humanities categories)*

### 2. Mathematics and Natural Sciences

(10 hours)

*The mathematics and sciences requirements are fulfilled by courses completed for the engineering program.*

### 3. Social Sciences

(9 hours)

HIST 100/111 The Contemporary World in Historical Perspective *and two behavioral and social science courses from the following:*

POSC 110/112 Introduction to American Politics

POSC 113/114 Introduction to World Politics

ECON 200 Basic Economics *or* ECON 201/211 Princ. of Econ.

GEOG 104/114 Human Geography

PSYC 150/151 General Psychology

SOCI 100/111 Introduction to Sociology

## Summary of Advanced Studies Requirements

### Two courses (6 credits) required:

Must be 300-400 level courses taken after 56 credits. Students may substitute an approved senior capstone course in their major taken after 86 credits for one of the two required Advanced Studies courses. The other course **must** be outside the major. The following may not be used to fulfill Advanced Studies requirements:

- Professional Writing courses
- Courses used to meet Distributive Studies requirements
- Internships or other experiential learning types of courses
- Courses taken on a pass/fail basis

One independent studies course (*minimum of three credits, outside the major*) may be used toward Advanced Studies requirements as long as it is consistent with the rules above and approved by the Engineering Coordinator.

# Electrical Engineering

## Collaborative Program

### Major

#### Coordinator:

Oguz Soysal, Chair,  
Department of Physics and  
Engineering

- A collaborative program between FSU and the University of Maryland, College Park, which allows students to remain on the Frostburg campus for four years while receiving a B.S. degree in electrical engineering from UM,CP.
- During the freshman and sophomore years, you will be enrolled as a pre-engineering major. You will complete general education and engineering science courses taught by faculty on-site at FSU. FSU tuition rates will apply.
- You must complete UM,CP's general education program requirements, as outlined under the GEP for Engineering Majors section in this catalog.
- After completing 45 credits of designated course work, you must apply for admission to College Park's Clark School of Engineering. After meeting UMCP's admissions standards, you will be accepted into the second half of the program as an engineering major. UMCP's tuition rates will apply for this part of the program. You must re-apply for financial aid and scholarships through UM,CP.
- Upper level engineering courses will be delivered over interactive video from College Park to FSU. All laboratory and design courses will be taught by FSU faculty.

	For Major
Hours Required in Engineering:	51
Hours Required in Other Departments:	57
<b>Total Hours Required:</b>	<b>108</b>

## Summary of Pre-Engineering Requirements

### 1. Introductory Level Courses

(18 hours)

ENES 100 Introduction to Engineering Design  
 ENEE 114 Programming Concepts for Engineers  
 ENEE 204 Basic Circuit Theory  
 ENEE 206 Fundamental Electric and Digital Circuit Laboratory  
 ENEE 241 Numerical Techniques in Engineering  
 ENEE 244 Digital Logic Design

### 2. Required Courses in Other Departments

(41 hours)

CHEM 101 General Chemistry I (*Meets GEP requirement*)  
 CHEM 102 General Chemistry II  
 ENGL 101 Freshman Composition (*Meets GEP requirement*)  
 ENGL 338 Technical Writing *or* ENGL 339 Scientific Writing (*Meets GEP requirement*)  
 MATH 226 Calculus I (*Meets GEP requirement*)  
 MATH 227 Calculus II  
 MATH 228 Calculus III  
 MATH 320 Multivariable Calculus  
 MATH 432 Differential Equations  
 PHYS 261 Principles of Physics I: Mechanics (*Meets GEP requirement*)  
 PHYS 262 Principles of Physics II: Electricity and Magnetism  
 PHYS 263 Principles of Physics III: Sound and Light

## Summary of Engineering Requirements

### 1. Advanced Engineering Courses:

(20 hours)

ENEE 302 Digital Electronics  
 ENEE 306 Electronic Circuits Design Lab  
 ENEE 312 Semiconductor Devices and Analog Electronics  
 ENEE 322 Signal and System Theory  
 ENEE 324 Engineering Probability  
 ENEE 350 Computer Organization  
 ENEE 381 Electromagnetic Wave Propagation

### 2. Required Physics Course:

(4 hours)

PHYS 312 Electricity and Magnetism (*substituting for ENEE 380*)

### 3. Elective Courses in Electrical Engineering:

(13 hours)

Must include at least four credits of advanced laboratory courses and at least one capstone design course.

### 4. Elective Courses in Other Departments:

(12 hours)

At least three credits of the required 12 must be a 400-level Math course. The remaining credits may be selected from an approved list of math, physics, or mechanical engineering courses.

# Mechanical Engineering

## Collaborative Program

### Major

#### Coordinator:

Chandra Thamire, Assistant Professor, Department of Physics and Engineering

- A collaborative program between Frostburg State University and the University of Maryland, College Park, which allows students to remain on the Frostburg campus for four years while receiving a B.S. degree in mechanical engineering from UM,CP.
- During the freshman and sophomore years, you will be enrolled as a pre-engineering major. You will complete general education and engineering science courses taught by faculty on-site at FSU. FSU tuition rates will apply.
- You must complete UMCP's general education program requirements, as outlined under the GEP for Engineering Majors section in this catalog.
- After completing 45 credits of designated course work, you must apply for admission to College Park's Clark School of Engineering. After meeting UM,CP's admissions standards, you will be accepted into the second half of the program as an engineering major. UMCP's tuition rates will apply for this part of the program. You must reapply for financial aid and scholarships through UM,CP.
- Upper level engineering courses will be delivered over interactive video from College Park to FSU. All laboratory and design courses will be taught by FSU faculty.

	For Major
Hours Required in Engineering:	66
Hours Required in Other Departments:	41
Total Hours Required:	107

## Summary of Pre-Engineering Requirements

### 1. Engineering Science Courses

(12 hours)

ENES 100 Introduction to Engineering Design  
 ENES 102 Statics  
 ENES 220 Mechanics of Materials  
 ENES 221 Dynamics

### 2. Required Courses in Other Departments

(41 hours)

CHEM 101 General Chemistry I (*Meets GEP requirement*)  
 CHEM 102 General Chemistry II  
 ENGL 101 Freshman Composition (*Meets GEP requirement*)  
 ENGL 339 Scientific Writing or ENGL 338 Technical Writing (*Meets GEP requirement*)  
 MATH 226 Calculus I (*Meets GEP requirement*)  
 MATH 227 Calculus II  
 MATH 228 Calculus III  
 MATH 320 Multivariable Calculus  
 MATH 432 Differential Equations  
 PHYS 261 Principles of Physics I: Mechanics (*Meets GEP requirement*)  
 PHYS 262 Principles of Physics II: Electricity and Magnetism  
 PHYS 263 Principles of Physics III: Sound and Light

## Summary of Engineering Requirements

### 1. Required Engineering Courses

(36 hours)

ENME 232 Thermodynamics  
 ENME 252 Electronics and Instrumentation I  
 ENME 271 Numerical Methods in Mechanical Engineering  
 ENME 331 Fluid Mechanics  
 ENME 332 Transfer Processes  
 ENME 351 Electronics and Instrumentation II  
 ENME 361 Vibration, Controls and Optimization I  
 ENME 462 Vibration, Controls and Optimization II  
 ENME 382 Engineering Materials and Manufacturing Processes  
 ENME 392 Statistical Methods for Product and Process Development  
 ENME 371 Product Engineering and Manufacturing  
 ENME 472 Integrated Product and Process Development II

### 2. Elective Hours in Department

(18 hours)

# English

	For Major	For Minor	For Teaching Certification Option
Hours Required in English:	40	24	40
Hours Required in Other Departments:	0	0	42.5
Total Hours Required:	40	24	82.5

## Major

## Minor

### Concentrations in: literature creative writing professional writing

### Teaching Certification Option

#### Professors:

Dolly, D. Gartner, Hurd,  
LaChance, A. F. Parks, K.  
Schlegel (Chair)

#### Associate Professors:

R. Brewer, Coward, Lutz,  
McShane, Pula, Smith,  
Snelson

#### Assistant Professors:

Barkley, Kehrwald,  
Tannacito

#### Instructor:

Burritt

- If you wish to obtain secondary school teaching certification, you must complete the Teaching Certification Option.
- An internship is required for the Teaching Certification Option, but in other English concentrations, an internship is optional.
- The department also offers a minor in writing and participates in the public relations and environmental humanities minors (see separate sections of this catalog).
- ENGL 101, 111, 150, 221, 250, 308, 309, 310, and 312 do not count toward major or minor.

## Summary of Requirements for Major/Minor in English

Major	Minor
<p><b>1. Core Curriculum</b> (15 hours) ENGL 260 British Literature: Beowulf to Present* ENGL 261 American Literature: Colonial to Present* ENGL 270 European and Neo-European Literature* or ENGL 271 Asian and African Literature* ENGL 300 Critical Writing about Literature* ENGL 306 Introduction to English Linguistics* ** or ENGL 416 History of the English Language* **</p> <p><i>* Must have a C or better to count toward major.</i> <i>** Students in the Teaching Certification track must take ENGL 416 to fulfill their Major Core Curriculum.</i></p>	<p><b>1. Core Curriculum</b> (15 hours-Same as major)</p>
<p><b>2. Concentrations</b> (25 hours) <i>Majors must choose one of the following concentrations:</i></p> <ul style="list-style-type: none"> <li>● Literature</li> <li>● Creative Writing</li> <li>● Professional Writing</li> </ul> <p>or</p> <ul style="list-style-type: none"> <li>● Teaching Certification Option</li> </ul> <p>(Requirements for each are specified below.)</p>	<p><b>2. Minor Core Requirement</b> (3 hours) ENGL 340 Shakespeare</p>
	<p><b>3. Electives</b> (6 hours) <i>Criteria for electives: Students must take 6 hrs. of literature at the 300/400 level.</i></p>

## Requirements for Literature Concentration

- 1. Major Core Curriculum:**  
(15 hours - listed above)
- 2. Concentration Core Requirements:**  
(4 hours)  
ENGL 340 Shakespeare  
ENGL 489 English Capstone
- 3. Electives:**  
(21 hours)  
*Criteria for electives: Students must take a minimum of 18 hours at the 300/400 level. Students may count a maximum of 6 hours of writing courses beyond ENGL 300 Critical Writing about Literature.*

## Requirements for Creative Writing Concentration

- 1. Major Core Curriculum:**  
(15 hours - listed above)
- 2. Concentration Requirements:**  
(22 hours)  
ENGL 334 Creative Writing: Fiction  
ENGL 335 Creative Writing: Poetry  
ENGL 408 Modern and Post-Modern American Fiction  
or ENGL 426 Modern American Poetry  
ENGL 460 Form and Theory of Fiction and Poetry  
ENGL 470 Senior Workshop  
ENGL 489 English Capstone

*Six hours from the following:*  
 ENGL 360 Creative Nonfiction  
 ENGL 434 Advanced Fiction Writing  
 ENGL 435 Advanced Poetry Writing

- 3. Elective:**  
*(3 hours)*  
*English course (300/400 level)*

### Requirements for Professional Writing Concentration

---

- 1. Major Core Curriculum**  
*(15 hours - listed above)*
- 2. Concentration Requirements:**  
*(19 hours)*  
 ENGL 330 Business Writing  
*or* ENGL 338 Technical Writing  
 ENGL 336 Journalistic Writing  
 ENGL 360 Creative Nonfiction  
 ENGL 402 Editing and Production  
 ENGL 430 The Composing Processes  
 ENGL 436 Advanced News and Feature Writing  
 ENGL 489 English Capstone
- 3. Electives:**  
*(6 hours)*  
*Literature courses (300-400 level)*

- The discipline and/or education requirements for teaching certification may change as a result of NCATE program review requirements, or state or federal action. If you are interested in the Teaching Certification Option, you should stay in close contact with the department chair or coordinator and with the Educational Professions Department. It is to your advantage to complete an NCATE-approved program.

### Requirements for Teaching Certification Option

---

- 1. Major Core Curriculum:**  
*(15 hours - listed above)*
- 2. Teaching Certification Core Requirements:**  
*(16 hours)*  
 ENGL 306 Introduction to English Linguistics  
 ENGL 330 Business Writing  
*or* ENGL 334 Creative Writing: Fiction  
*or* ENGL 335 Creative Writing: Poetry  
*or* ENGL 336 Journalistic Writing  
 ENGL 340 Shakespeare  
 ENGL 420 Adolescent Literature  
 ENGL 430 The Composing Processes  
 ENGL 489 English Capstone
- 3. Electives**  
*(9 hours)*  
*Literature courses.*

### Summary of Requirements for Teaching Certification Option in English

---

If you wish to complete a Maryland State approved program in teaching English, you must:

- Complete the BA/BS in English (Teaching Certification Option)
- Meet the phase admissions requirements summarized in the Educational Professions section.
- Complete the professional education sequence described in Education: Secondary Programs.

# Environmental Analysis & Planning

	For Major
Hours Required in Geography:	46
Hours Required in Biology:	21-23
Hours Required in Other Departments:	17
<b>Total Hours Required:</b>	<b>84-86</b>

## Summary of Requirements for Major in Environmental Analysis and Planning

### Major

Major

#### Coordinator:

Tom Small, Professor and  
Chair, Department of  
Geography

#### Participating Faculty:

##### Professors:

Barry, Riley, Yoder  
(Biology), Caupp, Precht,  
Small (Geography)

##### Associate Professors:

G. Brewer, Raesley (Biology),

##### Assistant Professors:

Bowe, Pegg, Shumway  
(Biology), Kessler, Neave, Xu  
(Geography)

- This multidisciplinary program is jointly administered by the Departments of Biology and Geography.
- You may not minor in Environmental Analysis and Planning.
- The program is supported by the Maryland Department of the Environment.
- Internship is optional.
- You are advised to complete the 100- and 200-level courses within your first 60 hours of course work, and before enrolling in 400-level courses in Geography and Biology.

#### 1. Courses in Biology:

*(21-23 hours)*

BIOL 149, 150 General Biology I and II (*149-GEP LAC Group C*)  
BIOL 314 Plant Taxonomy  
BIOL 340 General Ecology

*Take 2 of 4 courses:\**

BIOL 303 Plant Physiology  
BIOL 304 Microbiology  
BIOL 421 Sample Design and Analysis of Plant Communities  
BIOL 430 Limnology

#### 2. Courses in Geography:

*(46 hours)*

GEOG 103 Physical Geography (*GEP LAC Group C*)  
*or* GEOG 113 Honors Physical Geography  
GEOG 275 Introduction to Spatial Analysis  
GEOG 307 Advanced Physical Geology  
GEOG 308 Advanced Historical Geology  
GEOG 310 Fundamentals in the Mapping Sciences  
GEOG 413 Remote Sensing -Aerial Photo Interpretation  
GEOG 432 Hydrology  
GEOG 433 Surveying  
GEOG 440 Introduction to Soils  
GEOG 441 Soil Analysis  
GEOG 470 Soil & Water Engineering  
GEOG 471 Engineering for Land Development  
GEOG 472 Environmental Planning  
GEOG 473 Environmental Law

#### 3. Required Courses in Other Departments:

*(17 hours)*

CHEM 101,102 General Chemistry I and II (*101-GEP LAC Group C*)  
ENGL 338 Technical Writing (*GEP BR Adv. Comp.*)  
MATH 209 Elements of Applied Probability and Statistics (*GEP BR Math*)  
MATH 220 Calculus for Applications  
*or* MATH 226 Calculus I (*GEP BR Math*)

*\*GEOG 445, Biogeography, may be substituted for one of the BIOL electives.*

# Environmental Humanities

## Minor

### Coordinator:

James R. Hagen, Associate Professor of History

### Participating Faculty:

#### Professors:

Caupp (Geography), Davis (Visual Arts), Precht (Geography)

#### Associate Professors:

G. Brewer, Pegg, Raesley (Biology), Hurd (English), Kroeger-Mappes (Philosophy), Larivee (Chemistry)

- The Environmental Humanities Minor offers a multicultural and multidisciplinary approach designed to help students experience and understand cultural inter-relationships with the natural environment. Students learn to integrate an appreciation of the global development of environmental ideas and values with direct experience and participation in visual and verbal landscapes. Students focus on the natural region of the Potomac Watershed and/or selected Third World countries.
- This minor is open to and appropriate for students majoring in any field who wish to contribute a humanistic understanding to contemporary preoccupations with environmental issues.
- You cannot major in Environmental Humanities.

For Minor

Total Hours Required:

18-19

## Summary of Requirements for Minor in Environmental Humanities

Minor

### 1. Required Core Courses:

(9 credits)

HIST 309 World Environmental History  
ENGL 440 Literature of the Environment  
PHIL 315 Philosophy and the Environment

### 2. Applications:

(6-7 credits)

Choose either a, b, or c:

#### a. Arts and Cultures:

Take 2 of the following courses from 2 different disciplines

LING 301 Introduction to Language  
ART 301 Artistic Traditions: Asia  
ART 302 Artistic Traditions: Africa and the Americas  
ART 380 19th-Century Art History  
ENGL 303 American Romantic Lit.  
ENGL 313 English Romantic Lit.

#### b. Society and Cultures:

Take 2 of the following courses from 2 different disciplines

SOCI 224 Cultural Anthropology  
ECON 410 Resource and Environmental Economics  
POSC 450 Environmental Public Policy  
GEOG 472 Environmental Planning  
GEOG 473 Environmental Law

#### c. Science and Cultures:

Take 2 of the following courses from 2 different disciplines

BIOL 109 Human Biology and the Environment (GEP LAC Group C)  
BIOL 340 General Ecology  
GEOG 405 Climatology  
GEOG 445 Biogeography  
CHEM 100/113 Chemistry and Society (GEP LAC Group C)

### 3. Required Final Project:

(3-9 credits)

HUMA 495 Project in Environmental Humanities

# Environmental Policy

## Minor

### Coordinator:

Stephen Hartlaub, Assistant Professor, Department of Political Science

### Participating Faculty:

#### Professor:

Caupp (Geography), Dalton (Economics)

#### Associate Professor:

G. Brewer (Biology)

#### Assistant Professor:

Hartlaub (Political Science)

- For advising, see Coordinator.
- See the Coordinator for a listing of Special Topics courses offered for the minor in future semesters.
- A background in the natural sciences is strongly recommended.
- You cannot major in Environmental Policy.

# Exercise & Sport Science

## Major

### Concentrations in:

**athletic training**

**health fitness**

**health promotion**

### Professors:

Surgent, K. Wolfe

### Associate Professor:

A. Siemann,

### Assistant Professors:

Gray, Wright

### Instructor:

Strieby

### Head Athletic Trainer:

Zaloga

- You must complete one concentration.

For Minor

Total Hours Required

21-22

## Summary of Requirements for Minor in Environmental Policy

Minor

### 1. Required Core Courses

(12 hours)

ECON 410 Resource and Environmental Economics

GEOG 473 Environmental Law

POSC 450 Environmental Public Policy

EPOL 491 Seminar in Environmental Policy

### 2. Elective Courses - no more than 6 cr. from any one department

(9-10 hours)

ECON 408 Urban and Regional Economics

GEOG 450 Urban Planning

GEOG 472 Environmental Planning

POSC 351 Public Administration

POSC 352 Interest Groups and Public Policy

One Upper Division course in the Natural Sciences

Special Topics courses ECON 490, GEOG 490, or POSC 491 when approved by the Minor Coordinator.

Independent Studies courses ECON 499, GEOG 499, or POSC 498 (maximum of 3 cr.) when approved by the Minor Coordinator.

	Athletic Training	Health Fitness	Health Promotion
Hours Required in HPE:	49	48	43
Hours Required in Other Departments:	24	24	27
Total Hours Required:	73	72	70

## Summary of Requirements for Major in Exercise and Sport Science

### 1. Discipline Core Courses

(22 hours)

HEED 101 Community Health Promotion

HEED 102 First Aid

HEED 103 Foundations of Exercise and Sport Science

HEED 200 Nutrition

HEED 306 Organization and Administration of Exercise and Sport Science

PHEC 163 Strength Training and Conditioning

PHEC 401 Physiology of Exercise

PHEC 411 Evaluation and Prescription

PHEC 435 Physical Activity for the Older Adult

### 2. Courses Required in Other Departments

(18 hours)

BIOL 149 General Biology

BIOL 201 Anatomy and Physiology I

BIOL 202 Anatomy and Physiology II

MATH 209 Elements of Applied Probability and Statistics

PSYC 150 General Psychology

- If you are interested in athletic training, you should meet with the program coordinator during your first semester at FSU.

### 3. Concentrations

*Complete one of the following concentrations:*

#### a. Athletic Training

*(27 hours)*

HEED 210 Athletic Taping and Bracing Techniques  
 HEED 222 Clinical Experiences in Athletic Training I  
 HEED 223 Clinical Experiences in Athletic Training II  
 HEED 305 Care and Prevention of Athletic Injuries  
 HEED 318 Orthopedic Assessment I Upper Extremity  
 HEED 319 Orthopedic Assessment II Lower Extremity  
 HEED 322 Clinical Experiences in Athletic Training III  
 HEED 323 Clinical Experiences in Athletic Training IV  
 HEED 408 Therapeutic Modalities  
 HEED 413 Rehabilitation Techniques  
 HEED 422 Clinical Experiences in Athletic Training V  
 HEED 423 Clinical Experiences in Athletic Training VI  
 PHEC 303 Biomechanics for Exercise and Sport Science

#### Courses in Other Departments

*(6 hours)*

PHIL 101 Introduction to Philosophy  
 PHIL 313 Biomedical Ethics

- Upon completion of degree requirements you will be eligible to take the ACSM certification exam for Health Fitness Instructor.
- You must complete a 9-credit internship during your senior year.

#### b. Health Fitness

*(26 hours)*

HEED 305 Care and Prevention of Athletic Injuries  
 PHEC 109 Aerobic Fitness  
 PHEC 303 Biomechanics for Exercise and Sport Science  
 PHEC 350 Lifeguarding  
 PHEC 351 Water Safety Instructor  
 PHEC 410 Advanced Strength Training  
 PHEC 482 Field Experience in Health Fitness  
 PHEC 495 Internship in Health Fitness

#### Courses in Other Departments

*(6 hours)*

ACCT 100 Financial Accounting  
 BUAD 100 Introduction to Business

- You must complete a 9-credit internship during your senior year.
- If you have a GPA of 2.75 or higher you can be accepted into the Master's Degree Program in Community Health Promotion at West Virginia University.

#### c. Health Promotion

*(21 hours)*

HEED 202 Coordinated School Health Program  
 HEED 404 Health Instruction  
 HEED 405 Sexuality  
 HEED 409 Consumer and Environmental Health  
 HEED 495 Internship in Health Promotion

#### Courses in Other Departments

*(9 hours)*

CMST 132 Introduction to Interpersonal and Small Group Communication  
 PSYC 212 Adolescence and Adulthood  
 PSYC 430 Health Psychology

# Fine Arts

## Minor

### Professors:

Davis (chair), Dieruf,  
Llewellyn

### Associate Professors:

Brown, Rhodes, Sattinger

### Assistant Professor:

Truman

- Minors are also offered in art history and graphic design. A major is offered in Art & Design. See separate listings in this catalog.
- Only courses in which a grade of C or better is earned may count towards satisfaction of major and minor requirements.
- You cannot major in Fine Arts.

	For Minor
Hours Required in Art:	24
Hours Required in Other Departments:	0
<b>Total Hours Required:</b>	<b>24</b>

## Summary of Requirements for Minor in Fine Arts

Minor

### 1. Basic Courses:

*(6 hours)*

ART 104 Foundational Studies I

ART 105 Foundational Studies II

### 2. Art History and Critical Studies:

*(6 hours)*

ART 415 Art Criticism

*and choose 3 hours from:*

ART 301 Artistic Traditions: Asia *or* ART 302 Artistic Traditions: Africa and the Americas

ART 360 Western Art History

ART 380 19th Century Art History

ART 408 20th Century Art History

ART 460 Renaissance and Baroque Art History

### 3. Introductory Studio:

*(9 hours)*

*Choose 6 hours from:*

ART 207 Graphic Design

ART 212 Drawing

ART 221 Painting

ART 232 Printmaking

ART 235 Photography

*and choose 3 hours from:*

ART 202 Ceramics

ART 209 Crafts Workshop

ART 236 Digital Imaging

ART 240 Sculpture

### 4. Advanced Studio Art:

*choose 3 hours from:*

ART 307 Computer Graphics

ART 402 Advanced Ceramics

ART 407 Advanced Graphic Design: Print and Video Media

ART 421 Advanced Painting

ART 432 Advanced Printmaking

ART 435 Advanced Photography

ART 440 Advanced Sculpture

# Foreign Languages & Literature

## Major

## Minor

## Teaching Certification Option

### Professor:

O'Brien (Chair)

### Assistant Professors:

Sanchez

### Instructor:

Cardinale

- You may major or minor in Foreign Languages & Literature with a concentration in French or Spanish.
- At least half of the credit hours required in your major language (French or Spanish) must be taken at FSU.
- Foreign language majors who have courses transferred from a foreign institution at the 300 or 400 level must take at least one 300 or 400 level course at FSU after they return and prior to graduation.
- Only courses in which a grade of C or better is earned will count towards satisfaction of major or minor requirements.
- The department also offers course work in intercultural studies, literature in translation, and linguistics.
- The discipline and/or education requirements for teaching certification may change as a result of NCATE program review requirements, or state or federal action. If you are interested in the Teaching Certification Option, you should stay in close contact with the department chair or coordinator and with the Educational Professions Department. It is to your advantage to complete an NCATE-approved program.

	For Major	For Minor	For Teaching Cert. Option
Hours Required in Foreign Languages & Literature:	30	18	30
Hours Required in Other Departments:	variable	0	variable
<b>Total Hours Required:</b>	<b>30-variable</b>	<b>18</b>	<b>72.5-variable</b>

## Accelerated Placement

The department reviews all first time students' records, and other students' records by request, to determine if they are eligible for accelerated placement in language courses. If you are eligible for accelerated placement and complete a course above the 101-level with a grade of C or better, you may apply to the department for academic credit for the courses waived, as summarized below.

- at the 102 level, you will be eligible to receive 3 additional credits.
- at the 211 level, you will be eligible to receive 6 additional credits.
- at the 212 level, you will be eligible to receive 9 additional credits.
- at the 250 level, you will be eligible to receive 12 additional credits.
- at the 300 level, you will be eligible to receive 15 additional credits.

There is a \$10.00 fee for each hour of credit received through accelerated placement.

## Summary of Requirements for Major in Foreign Languages & Literature

The requirements for a major in foreign languages and literature with a concentration in French or Spanish consist of a minimum of 27 semester hours of credit beyond the 250 course. Courses in the particular concentration (French or Spanish) include five 300-level and four 400-level courses. All majors must also take Linguistics 301: Introduction to Language. In addition, one of the following options must be completed:

**Group I Language Orientation:** completion of a second foreign language through the 250 level.

**Group II Second Major:** Completion of a second major in another department.

## Summary of Requirements for Minor in Foreign Languages & Literature

The minor in French or Spanish consists of at least three 300- or 400-level courses (9 credit hours beyond the 250 course). Students minoring in a language who begin course work at the 300-level are required, through accelerated placement, to pay the fee of \$10.00 per credit hour for the 211, 212, and 250 courses. A minor in a foreign language meets Group B, GEP LAC. Extra courses may be used to fulfill Group E.

## Summary of Requirements for Teaching Certification Option in Foreign Languages & Literature

If you wish to complete a Maryland State approved program in teaching French or Spanish, you must:

- Complete the BA in Foreign Languages & Literature (French or Spanish).
- Meet the phase admissions requirements summarized in the Educational Professions section.
- Complete the professional education sequence described in Education: Secondary School Programs.

# Forestry

For Minor

Total Hours Required:

23

## Minor

### Summary of Requirements for Minor in Forestry

Minor

#### Coordinator:

Durland Shumway, Assistant  
Professor, Department of  
Biology

#### 1. Required Courses:

(17 hours)

BIOL 149 General Biology I  
BIOL 150 General Biology II  
BIOL 305 Dendrology  
BIOL 425 Forest Science  
BIOL 460 Forestry Field Practice

#### 2. Electives:

(6 hours)

At least 6 credits selected from two of the following groups:  
(Some of the following courses may have prerequisites.)

##### Geography

GEOG 433 Surveying  
GEOG 413 Remote Sensing - Aerial Photo Interpretation  
GEOG 317 Geographic Information Systems  
GEOG 440 Introduction to Soils  
GEOG 432 Hydrology  
GEOG 406 Conservation of Natural Resources  
GEOG 445 Biogeography

##### Biology

BIOL 421 Sample Design and Plant Community Analysis  
BIOL 410 Plant Diseases  
BIOL 230 Wildlife Techniques  
BIOL 494 Field Experiences in Biology\*  
BIOL 499 Special Problems in Biology \*

##### Other electives

RECR 342 Park and Facility Design  
RECR 440 Organization & Administration of Recreation & Parks  
POSC 450 Environmental Public Policy  
POSC 498 Readings in Political Science  
ECON 410 Resource & Environmental Economics

\*Independent studies courses **MUST** address a **Forestry** topic.

# Geography

## Major

## Minor

### Concentrations in: mapping sciences urban planning

#### Professors:

Bullamore, Caupp, Precht,  
Small (Chair)

#### Associate Professor:

G. White

#### Assistant Professors:

Kessler, Neave, Saku, Xu

- You may elect concentrations in Urban Planning or Mapping Sciences.
- The department also offers majors in Earth Science and Environmental Analysis and Planning.
- An internship is optional.

	For Major	For Minor	For Mapping Sciences Concentration	For Urban Planning
Hours Required in Geography:	40	22-23	43	46
Hours Required in Other Departments:	3	0	6	9
<b>Total Hours Required:</b>	<b>43</b>	<b>22-23</b>	<b>49</b>	<b>55</b>

### Summary of Requirements for Major/Minor in Geography

(without specialized concentration)

Major	Minor
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#### 1. Required Core Courses:

(19 hours)

GEOG 103 Physical Geo. (GEP LAC Group C)  
 GEOG 104 Human Geo. (GEP LAC Group D)  
 GEOG 275 Spatial Analysis  
 GEOG 310 Fundamentals in the Mapping Sciences  
 GEOG 380 Research Methods  
 GEOG 480 The Geographic Perspective

(10 hours)

GEOG 103 Physical Geo. (GEP LAC Group C)  
 GEOG 104 Human Geo. (GEP LAC Group D)  
 GEOG 310 Fundamentals in the Mapping Sciences

#### 2. Advanced Physical Geography:

(6 hours)

Select one course in each of the two groups:

##### Group I

GEOG 405 Climatology  
 GEOG 440 Introduction to Soils  
 GEOG 445 Biogeography

##### Group II

GEOG 430 Fluvial Geomorphology  
 GEOG 431 Glacial & Pleistocene Geomorphology  
 GEOG 432 Hydrology

(3-4 hours)

Select from:

GEOG 307 Advanced Physical Geology  
 GEOG 308 Advanced Historical Geology  
 GEOG 405 Climatology  
 GEOG 430 Fluvial Geomorphology  
 GEOG 431 Glacial & Pleistocene Geomorphology  
 GEOG 432 Hydrology  
 GEOG 440 Introduction to Soils  
 GEOG 445 Biogeography

#### 3. Advanced Human Geography:

(6 hours)

Select one course in each of the two groups:

##### Group I

GEOG 300 Economic Geography  
 GEOG 325 Urban Geography: Metropolitan Systems  
 GEOG 410 Locational Analysis  
 GEOG 425 Geography of Transportation

##### Group II

GEOG 324 Urban Geography: Internal City Patterns  
 GEOG 407 Political Geography

(3 hours)

Select from:

GEOG 300 Economic Geography  
 GEOG 324 Urban Geography: Internal City Patterns  
 GEOG 325 Urban Geography: Metropolitan Systems  
 GEOG 407 Political Geography  
 GEOG 410 Locational Analysis  
 GEOG 421 Regional Planning  
 GEOG 425 Geography of Transportation

#### 4. Advanced Regional Geography:

(3 hours)

Select from:

GEOG 301 Geography of North America  
 GEOG 302 Geography of Maryland  
 GEOG 401 Geography of Europe  
 GEOG 402 Geography of Russia and the Former Republics  
 GEOG 403 Geography of Sub-Sahara Africa

(3 hours)

Select from:

GEOG 301 Geography of North America  
 GEOG 302 Geography of Maryland  
 GEOG 401 Geography of Europe  
 GEOG 402 Geography of Russia and the Former Republics  
 GEOG 403 Geography of Sub-Sahara Africa

#### 5. Geographic Techniques:

(3 hours)

Select from:

GEOG 315 Applied Design in the Mapping Sciences  
 GEOG 317 Geographic Information Systems  
 GEOG 412 Geographic Visualization  
 GEOG 413 Remote Sensing - Aerial Photo Interpretation  
 GEOG 433 Surveying

**6. Human Earth Relationships:***(3 hours)**Select from:*

- GEOG 406 Conservation of Natural Resources
- GEOG 450 Urban Planning
- GEOG 460 Natural Hazards in the Physical Environment
- GEOG 472 Environmental Planning
- GEOG 473 Environmental Law

**7. Electives***(0 hours)**(3 hours)**Select any from remaining GEOG courses***8. Required Courses in Other Departments:***(3 hours)*

- MATH 209 Elements of Applied Probability & Statistics (*GEP BR Math*)

**Requirements for Urban Planning Concentration****Requirements for Mapping Sciences Concentration****1. Required Core Courses:***(19 hours)*

- GEOG 103 Physical Geography (*GEP LAC Group C*)
- GEOG 104 Human Geography (*GEP LAC Group D*)
- GEOG 275 Spatial Analysis
- GEOG 310 Fundamentals in the Mapping Sciences
- GEOG 380 Research Methods
- GEOG 480 The Geographic Perspective

**2. Advanced Courses:***(15 hours)*

- GEOG 324 Urban Geography: Internal City Patterns
- GEOG 325 Urban Geography: Metropolitan Systems
- GEOG 421 Regional Planning
- GEOG 450 Urban Planning
- GEOG 472 Environmental Planning

**3. Advanced Electives:***(6 hours)**Select one course:*

- GEOG 432 Hydrology
- GEOG 440 Introduction to Soils
- GEOG 445 Biogeography
- GEOG 470 Soil and Water Engineering
- GEOG 471 Engineering for Land Development
- GEOG 473 Environmental Law

*Select one course:*

- GEOG 300 Economic Geography
- GEOG 407 Political Geography
- GEOG 410 Locational Analysis
- GEOG 425 Geography of Transportation

**4. Geographic Techniques:***(3 hours)**Select one course:*

- GEOG 315 Applied Design in the Mapping Sciences
- GEOG 317 Geographic Information Systems
- GEOG 412 Geographic Visualization
- GEOG 413 Remote Sensing - Aerial Photo Interpretation
- GEOG 414 Advanced Remote Sensing
- GEOG 433 Surveying

**1. Required Core Courses:***(19 hours)*

- GEOG 103 Physical Geography (*GEP LAC Group C*)
- GEOG 104 Human Geography (*GEP LAC Group D*)
- GEOG 275 Spatial Analysis
- GEOG 310 Fundamentals in the Mapping Sciences
- GEOG 380 Research Methods
- GEOG 480 The Geographic Perspective

**2. Advanced Physical Geography:***(3 hours)**Select one course:*

- GEOG 405 Climatology
- GEOG 430 Fluvial Geomorphology
- GEOG 431 Glacial & Pleistocene Geomorphology
- GEOG 432 Hydrology
- GEOG 440 Introduction to Soils
- GEOG 445 Biogeography

**3. Advanced Human Geography:***(3 hours)**Select one course:*

- GEOG 300 Economic Geography
- GEOG 324 Urban Geography: Internal City Patterns
- GEOG 325 Urban Geography: Metropolitan Systems
- GEOG 407 Political Geography
- GEOG 410 Locational Analysis
- GEOG 425 Geography of Transportation

**4. Geographic Techniques:***(15 hours)*

- GEOG 317 Geographic Information Systems
- GEOG 413 Remote Sensing - Aerial Photo Interpretation

*Select three courses from among:*

- GEOG 315 Applied Design in the Mapping Sciences
- GEOG 412 Geographic Visualization
- GEOG 414 Advanced Remote Sensing Techniques
- GEOG 417 Advanced Geographic Information Systems
- GEOG 418 Cartometrics
- GEOG 433 Surveying

**5. Advanced Regional Geography***(3 hours)**Select one course:*

- GEOG 301 Geography of North America
- GEOG 302 Geography of Maryland
- GEOG 401 Geography of Europe
- GEOG 402 Geography of Russia and the Former Republics
- GEOG 403 Geography of Sub-Sahara Africa

**6. Required Courses in Other Departments:***(9 hours)*

- MATH 209 Elements of Applied Probability & Statistics  
*(GEP BR Math)*

*Take one course from each of two departments:*

- ECON 308 Urban and Regional Economics
- ECON 404 Public Finance
- POSC 351 Public Administration
- POSC 456 Urban Politics and Policies
- POSC 458 American Public Policy
- SOCI 322 Social Demography
- SOCI 325 Community Analysis
- SOCI 328 Urban Life

**5. Advanced Regional Geography:***(3 hours)**Select one course:*

- GEOG 301 Geography of North America
- GEOG 302 Geography of Maryland
- GEOG 401 Geography of Europe
- GEOG 402 Geography of Russia and the Former Republics
- GEOG 403 Geography of Sub-Sahara Africa

**6. Required Courses in Other Departments:***(6 hours)*

- MATH 209 Elements of Applied Probability & Statistics  
*(GEP BR Math)*

*Select one course:*

- MATH 102 College Algebra *(GEP BR Math)*
- MATH 103 Trigonometry
- MATH 120 Pre-Calculus Mathematics *(GEP BR Math)*
- MATH 220 Calculus for Applications I
- MATH 221 Calculus for Applications II
- MATH 226 Calculus I *(GEP BR Math)*
- MATH 227 Calculus II

**7. Recommendations:***Students are encouraged to select additional course work:*

- MATH 103 Trigonometry - especially for cartography
- MATH 220 & 221 Calculus I and II - especially for remote sensing
- Computer Programming - complete a two-course sequence

# Graphic Design

**Minor****Professors:**

Davis (chair), Dieruf,  
Llewellyn

**Associate Professors:**

Brown, Rhodes, Sattinger

**Assistant Professor:**

Truman

- Minors are also offered in fine arts and art history. A major is offered in Art & Design. See separate listings in this catalog.
- Only courses in which a grade of C or better is earned may count towards satisfaction of major and minor requirements.
- You cannot major in Graphic Design.

	For Minor
Hours Required in Art:	24
Hours Required in Other Departments:	0
<b>Total Hours Required:</b>	<b>24</b>

**Summary of Requirements for Minor in Graphic Design**

Minor

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**1. Basic Courses:***(9 hours)*

- ART 104 Foundational Studies I
- ART 105 Foundational Studies II
- ART 207 Graphic Design

**2. Art History and Critical Studies:***(6 hours)*

- ART 415 Art Criticism
- and choose 3 hours from:*
- ART 360 Western Art History
- ART 408 20th Century Art History

**3. Introductory Studio:***(3 hours)**Choose from:*

- ART 202 Ceramics
- ART 221 Painting
- ART 232 Printmaking
- ART 235 Photography
- ART 240 Sculpture

**4. Advanced Studio Focus:***(6 hours)*

- ART 307 Computer Graphics
- ART 407 Advanced Graphic Design (Print & Video)

# Health & Physical Education

## Major with Teaching Certification

### Professors:

C. Hircock, R. Lewis,  
Surgent, K. Wolfe

### Associate Professor:

B. Hircock (chair), A.  
Siemann

### Assistant Professors:

Gray, Irwin, Wright

### Instructors:

Palumbo, Strieby

- Upon successful completion of the program, you will be eligible to apply for 7-12 health certification and K-12 physical education certification.
- The Department of HPER also offers majors in Recreation and Exercise and Sport Science. Majors in Exercise and Sport Science choose a concentration in athletic training, health fitness or health promotion (see separate sections of this catalog).
- A minor is offered in coaching (see separate section of this catalog). You cannot minor in Health and Physical Education.
- The discipline and/or education requirements for teaching certification may change as a result of NCATE program review requirements, or state or federal action. If you are interested in the teaching certification option, you should stay in close contact with the Department Chair or Coordinator and with the Department of Education Professions. It is to your advantage to complete an NCATE-approved program.

For Major and  
Teaching Certification

Hours Required in HPE:	75
Hours Required in Other Departments:	30
Total Hours Required:	105

## Summary of Requirements for Major in Health & Physical Education

Major

### 1. Discipline Core:

(57 hours)

#### Health Education (26 hours)

HEED 100 Personal Wellness  
HEED 104 Foundations of Health Education  
HEED 202 Coordinated School Health Program  
HEED 216 Content in the School Health Program Part I  
HEED 311 Assessment & Evaluation Methodology  
HEED 316 Content in School Health Program Part II  
HEED 317 Content in School Health Program Part III  
HEED 416 Curriculum Design in Health Education  
HEED 418 Current Issues in Health

#### Physical Education (31 hours)

PHEC 103 Foundations of Physical Education  
PHEC 164 Teaching of Physical Education Through Outdoor Adventure Education  
PHEC 165 Teaching of Physical Education Through Cooperative Team Challenges  
PHEC 166 Teaching of Physical Education Through Tactical Approaches  
PHEC 167 Teaching of Physical Education Through Educational Gymnastics  
PHEC 168 Teaching of Physical Education Through Dance Forms  
PHEC 169 Teaching of Physical Education Through Weight Training  
PHEC 301 Biomechanics for Teacher Education  
PHEC 310 Organization & Administration of Health and Physical Education  
PHEC 402 Adapted Physical Activities  
PHEC 406 Applied Physiology  
PHEC 407 Motor Learning and Performance  
PHEC 408 Movement Experiences for Children  
PHEC 416 Curriculum Design in Physical Education

#### Transfer Students

PHEC 170 Physical Education Teaching Lab

### 2. Required Courses in Other Departments:

(8 hours)

BIOL 149 General Biology I (*GEP LAC Group C*)  
BIOL 211 Essentials of Anatomy and Physiology

### 3. Other requirements

(0 hours)

- All majors are required to pass/document/take swimming skills at the intermediate level as a graduation requirement. Non-swimmers must take PHEC 250 as a prerequisite to PHEC 251.
- All majors are required to take or document first-aid certification as a graduation requirement.

### 4. Education Courses

(40 hours)

**Pre-Phase** EDUC 100 Career Analysis in Education  
(4 hours) EDUC 201 Students, Teachers, and Learning Environments

**Phase I** EDUC 202 Foundations of Learning & Instruction  
(7 hours) EDUC 346 Educational Technology Lab I  
REED 317 Content Area Reading

**Phase II** EDUC 392 K-12 Field Experience  
(14 hours) EDUC 447 Educational Technology Lab II  
HEED 404 Health Instruction  
PHEC 418 Physical Education in the Secondary School  
REED 318 Reading and Writing Connections  
SPED 361 Adapting Instruction in a Diverse Classroom

**Phase III** EDUC 406 Leadership Seminar  
(15 hours) EDUC 448 Educational Technology Lab III  
PHEC 497 Teaching Internship, K-12 Program

**6. Other graduation/program exit requirements**

- Successful presentation of a developmental portfolio according to department format.
- Passing score on PRAXIS II as established by the state of Maryland.

**Summary of Requirements for Teaching Certification in Health and Physical Education**

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If you wish to complete a Maryland State approved program in teaching health and physical education, you must:

- Complete the BA/BS in Health and Physical Education.
- PHEC 402, 407, 408, 416, 418 and HEED 404 must be completed prior to the Phase III block, and are usually taken one semester prior to PHEC 497 - Teaching Internship.
- Meet the phase admissions requirements summarized in the Educational Professions section.
- Complete the professional education sequence described in Education: K-12 Programs.

# Health Science Administration

## Collaborative Program

### Major

#### Coordinator:

M. Shakil Rahman,  
Associate Professor,  
Department of Business  
Management

- If you complete the major in health science administration, you will earn the Bachelor of Technical and Professional Studies (BTPS) degree.
- Since health science administration is an interdisciplinary program, grades in all program courses completed at FSU count in the major grade point average.
- A three-credit field experience is required.

	For Major
Hours Required at Allegany College of Maryland	65-70
Hours Required at Frostburg State University	58-70
<b>Total Hours Required</b>	<b>127-140</b>

The Bachelor of Technical and Professional Studies degree in health science administration is a collaborative program between Frostburg State University and Allegany College of Maryland designed to provide advanced career opportunities for students who hold an Associate of Applied Science degree in a health professions area (currently respiratory therapist, occupational therapy assistant, physical therapy assistant, radiologic technology, dental hygiene, medical laboratory technology, nursing, and therapeutic massage). If you hold a similar degree in another program, you may be considered for admission based on an articulation agreement between FSU and the other undergraduate institution.

The program is designed to build on the scientific and clinical knowledge and experience gained in the associate degree program and through clinical experience in the field. You will increase your knowledge of core issues in health care and develop supervisory, management, and administrative skills required to move into a management position in health care administration. The program does not offer professional certification or licensure. If you are interested in continuing your education in your specialized licensure area, you should enroll in one of the baccalaureate programs offered by another University System of Maryland institution (see pre-professional program listings).

Degree candidates must meet the transfer admission requirements of Frostburg State University, and have successfully completed one of the Allegany College of Maryland health programs referenced. Course work for the baccalaureate degree may be completed on a full or part time basis. All core courses are scheduled in the evening, on a rotating basis, to meet the needs of working adults. You will receive a pre-planned course schedule, and will need to complete the courses when scheduled in order to complete the degree program in a reasonable period of time.

### Summary of Requirements for a Major in Health Science Administration

**1. An Associate of Applied Science degree** in a health profession field from Allegany College of Maryland. A maximum of 70 credits will transfer from all community colleges you have attended.

#### 2. General Education Requirements:

You must complete a minimum of 40 credits in general education as part of the baccalaureate program. The particular general education courses that will be required in addition to those completed for the A.A.S. degree depend on which health professions program you have completed.

The following courses, required to meet general education requirements at FSU, or as prerequisites for advanced course work at FSU, are recommended as selections for general education and general electives at Allegany College if they are not already required in the A.A.S. program:

Social Science:	Introduction to Psychology <b>and</b> Introduction to Sociology
Humanities:	Introduction to Philosophy <b>or</b> Contemporary Ethical Problems
Health Education:	Personal Wellness
General Elective:	Introduction to Computer Science

In addition, all students will complete an **Advanced Writing** course at FSU (see listing of options in the section on the Academic Program).

#### 3. Program Core Courses:

(18 hours)

SOCI 367 Sociology of Medicine

PHIL 313 Biomedical Ethics

SOWK 375 Human Behavior and the Social Environment I

COSC 220 Introduction to Software Applications

BUAD 356 Leadership and Interpersonal Skills

\_\_\_\_\_ (Legal Issues in Health — transfer course, to be specified)

**4. Administration Courses:***(30 hours)*

COSC 100 Introduction to Computer Science  
 ACCT 100 Financial Accounting  
 ECON 200 Basic Economics  
 MATH 209 Elements of Applied Probability and Statistics  
 BUAD 351 Management of Organizations  
 BUAD 361 Principles of Marketing  
 BUAD 303 Principles of Finance  
 BUAD 357 Human Resource Management  
 BUAD 359 Total Quality Management  
 BUAD 494 Field Experience in Business Administration

**5. Program Elective Course:***(3 hours)**Select one course from among:*

BUAD 355 Operations Management  
 BUAD 480 Business and Society  
 PSYC 430 Health Psychology  
 SOCI 468 Sociology of Later Life

# History

**Major****Minor**

**Concentrations in:  
 international history  
 history of the Americas  
 public history**

**Professors:**

Clulee (Chair), Dean,  
 McGovern, Wiseman

**Associate Professors:**

Boniece, Hagen

**Assistant Professors:**

Charney, Johansen

- An internship is optional.

	For Major	For Minor
Hours Required in History:	39	24
Hours Required in Other Departments:	6	0
<b>Total Hours Required:</b>	<b>45</b>	<b>24</b>

**Summary of Requirements for Major/Minor in History**

Major	Minor
<p><b>1. Core Introductory Level Courses:</b>  <i>(12 hours)</i>            HIST 103 History of the United States            HIST 104 History of the United States            HIST 113 World History            HIST 114 World History</p> <p><b>2. Research Core:</b>  <i>(6 hours)</i>            HIST 299 Writing and Research in History  <i>(Completion of HIST 299 with a C or better is required for admission to the history major. Students may file a declaration of major BEFORE completing HIST 299).</i>            HIST 485 <i>(must be completed during the senior year with a grade of C or better)</i></p> <p><b>3. Concentrations:</b>  <i>(27 hours)</i>  <i>Majors must choose one of the following concentrations:</i>  <b>International History</b>  <b>History of the Americas</b>  <b>Public History</b></p> <p><b>4. Electives</b>  <i>(0 hours)</i></p>	<p><i>(12 hours)</i>            HIST 103 History of the United States            HIST 104 History of the United States            HIST 113 World History            HIST 114 World History</p> <p><b>Minor</b>  <i>(12 hours)</i>  <i>Select from any courses at the 300 or 400 level.</i></p>

## Requirements for International History Concentration

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1. Select five courses from the following areas:

### Europe

HIST 305 Gender and Society in Modern Europe  
 HIST 306 Medieval Europe  
 HIST 307 Renaissance and Reformation Europe  
 HIST 308 Europe, 1600-1815  
 HIST 309 World Environmental History  
 HIST 310 Ancient Greece and Rome  
 HIST 325 History of Modern Science  
 HIST 344 Modern Western Europe  
 HIST 346 History of Modern Ireland  
 HIST 403 Imperial Russia  
 HIST 404 Revolutionary and Soviet Russia  
 HIST 408 The British Empire  
 HIST 409 The Scientific Revolution  
 HIST 422 Diplomatic History of Europe  
 HIST 446 Habsburg/Ottoman Empires & Eastern Europe

### Africa and Middle East

HIST 301 Traditional Africa  
 HIST 309 World Environmental History  
 HIST 341 Modern & Contemporary Middle East  
 HIST 408 The British Empire  
 HIST 453 Contemporary Africa

### Asia

HIST 309 World Environmental History  
 HIST 357 India  
 HIST 408 The British Empire  
 HIST 458 History of China and Korea  
 HIST 459 History of Japan  
 HIST 460 Modern and Contemporary Asia

### Latin America

HIST 303 History of Latin America  
 HIST 304 History of Latin America  
 HIST 309 World Environmental History  
 HIST 318 Native Peoples of the Americas  
 HIST 450 History of Mexico  
 HIST 455 Latin American Revolutions

2. Select two History courses from any other History concentration (*History of the Americas and/or Public History*).

3. Select two complementary courses from the following areas (some of these courses may require additional pre-requisite course work):

### Africa and Middle East

ART 301 Artistic Traditions: Asia  
 ART 302 Artistic Traditions: Africa and the Americas  
 ECON 405 Economic Growth and Development  
 ENGL 271 Asian and African Literature  
 GEOG 403 Geography of Africa  
 POSC 330 Politics of Africa  
 POSC 332 Politics of the Middle East

### Asia

ART 301 Artistic Traditions: Asia  
 ECON 405 Economic Growth and Development  
 ENGL 271 Asian and African Literature

### Latin America and the Caribbean

ART 302 Artistic Traditions: Africa and the Americas  
 ECON 405 Economic Growth and Development  
 GEOG 301 Geography of North America  
 POSC 331 Politics of Latin America

### Europe

ART 360 Western Art History  
 ECON 309 Comparative Economic Systems  
 ENGL 270 European and Non-European Literature  
 ENGL 307 16th and 17th Century English Literature  
 ENGL 313 English Romantic Literature  
 ENGL 322 The Restoration and Augustan Age  
 ENGL 323 Victorian Literature  
 ENGL 332 The Age of Johnson  
 ENGL 340 Shakespeare  
 ENGL 404 Modern British Fiction  
 ENGL 411 Chaucer and His Times  
 GEOG 401 Geography of Europe  
 GEOG 402 Geography of Russia and the Former Republics  
 POSC 333 Politics of Western Europe  
 POSC 334 Politics of Eastern Europe  
 POSC 431 Russian Politics

## Requirements for History of the Americas Concentration

### 1. Select five courses from the following areas:

#### United States

- HIST 309 World Environmental History
- HIST 345 History of Maryland
- HIST 380 The American West
- HIST 406 20<sup>th</sup>-Century African-American Leadership in the U.S.
- HIST 415 History of American Women
- HIST 428 Diplomatic History of the U.S.
- HIST 430 World Perspectives on America
- HIST 431 History of the American Family
- HIST 432 U.S. Immigration History
- HIST 461 Colonial America, 1607-1763
- HIST 462 Revolutionary America, 1763-89
- HIST 463 The Age of Jefferson and Jackson, 1789-1848
- HIST 464 The Civil War and Reconstruction, 1849-77
- HIST 465 Gilded Age America, 1877-1913
- HIST 466 The U.S. in the 20<sup>th</sup> Century, 1914-45
- HIST 467 The U.S. in the 20<sup>th</sup> Century, 1945-Present

#### Latin America and the Caribbean

- HIST 303 History of Latin America
- HIST 304 History of Latin America
- HIST 309 World Environmental History
- HIST 318 Native Peoples of the Americas
- HIST 430 World Perspectives on America
- HIST 450 History of Mexico
- HIST 453 Contemporary Africa
- HIST 455 Latin American Revolutions

### 2. Select either HIST 433 (Public History) plus one course from the International History concentration, or two courses from the International History concentration.

### 3. Select two complementary courses from the following areas (some of these courses may require additional pre-requisite course work):

#### United States

- ECON 303 American Economic Development
- ENGL 261 American Literature: Colonial to Present
- ENGL 303 American Romantic Literature
- ENGL 352 American Colonial Literature
- ENGL 407 American Fiction: 1865-1922
- ENGL 408 Modern and Post-Modern American Fiction
- GEOG 301 Geography of North America
- GEOG 324 Urban Geography: Internal City Patterns
- SOCI 305 Racial and Cultural Minorities
- POSC 321 American State and Local Politics
- POSC 363 Media and Politics
- POSC 421 American Legislative Politics
- POSC 427 The American Presidency
- POSC 471 American Political Thought

#### Latin America and the Caribbean

- ART 302 Artistic Traditions: Africa and the Americas
- ECON 405 Economic Growth and Development
- GEOG 301 Geography of North America
- POSC 331 Politics of Latin America

## Requirements for Public History Concentration

### 1. Public History Core

- HIST 433 Public History
- HIST 484 Practicum in History *or*
- HIST 492 Internship Seminar *and* HIST 495 Internship in History

### 2. Select three of the following courses:

- HIST 309 World Environmental History
- HIST 345 History of Maryland
- HIST 380 The American West
- HIST 406 20<sup>th</sup>-Century African-American Leadership in the U.S.
- HIST 415 History of American Women
- HIST 428 Diplomatic History of the U.S.
- HIST 430 World Perspectives on America
- HIST 431 History of the American Family
- HIST 432 U.S. Immigration History
- HIST 461 Colonial America, 1607-1763
- HIST 462 Revolutionary America, 1763-89
- HIST 463 The Age of Jefferson and Jackson, 1789-1848
- HIST 464 The Civil War and Reconstruction, 1849-77
- HIST 465 Gilded Age America, 1877-1913
- HIST 466 The U.S. in the 20<sup>th</sup> Century, 1914-45
- HIST 467 The U.S. in the 20<sup>th</sup> Century, 1945-Present

### 3. Select two courses from the International History Concentration.

### 4. Select two complementary courses from the following areas (some of these courses may require additional pre-requisite course work):

- ECON 303 American Economic Development
- GEOG 301 Geography of North America
- GEOG 324 Urban Geography: Internal City Patterns
- GEOG 325 Urban Geography: Metropolitan Systems
- GEOG 410 Locational Analysis
- GEOG 454 Geography of Tourism
- GEOG 455 Tourism Planning
- GEOG 472 Environmental Planning
- GEOG 473 Environmental Law
- POSC 323 Public Administration
- POSC 352 Interest Groups and Public Policy
- POSC 358 American Public Policy
- POSC 456 Urban Politics and Policies
- SOCI 325 Community Analysis
- SOCI 436 Sociological Aspects of Mass Communication

# Honors Program

Hours Required in English:	3
Hours Required in variants of the GEP program:	15-17
Hours Required in Seminars/Thesis	6
<b>Total Hours Required:</b>	<b>24-26</b>

## Director:

Maureen Connelly,  
Professor, Departments of  
Sociology and Social Work

- Students who have demonstrated a high degree of academic skill, creative talent, and motivation have the opportunity to participate in the University's Honors Program.
- Interested students who think they may qualify for the Honors Program should contact the Director at 301/687-4998.

The Honors Program offers a variety of courses specially designed for Honors students. These courses feature content and instructional methods that are challenging, provide a more active role for the student in the learning process, and emphasize understanding more than factual information, and quality of work rather than quantity. These courses seek to magnify problem-solving abilities, effective communications, an awareness of multiple perspectives, and a capacity for independent learning.

Many of the Honors courses are variants of courses included in the University's General Education Program. These variant courses are primarily intended to be taken during a student's first and second years. For juniors and seniors participating in the program, the Honors Seminars and Thesis provide unique environments and opportunities for learning.

In addition to the academic courses, the Honors Program offers a host of co-curricular activities, including the opportunity to reside in Honors/International Housing in Cambridge and Westminster Halls.

Ultimately the program seeks to foster within students dignity, self-esteem, and a knowledge of their own potential as human beings.

## Admission Requirements

Prospective Honors students are invited to join the program on the basis of their high school records and SAT scores. All entering students are invited to participate in the Honors Program if they have an SAT score of at least 1180 (ordinarily with neither the math score below 520 nor the verbal score below 580), graduate in the upper 10% of their high school classes, or have a high school grade point average of 3.50 or above.

Students who have completed at least one semester of work at Frostburg State or at another institution are eligible to be admitted to the Honors Program if they have a grade point average of 3.5 or above.

Students demonstrating considerable creative ability, as evidenced by papers, projects, creative writing, musical composition, art work, or musical performance are also admitted on an individual basis.

## Summary of Requirements for the Honors Program

Most students participating in the Honors Program are pursuing the distinction of graduating with "Honors in General Education." This distinction is awarded to students who complete the following Honors Program requirements:

- ENGL 111 or ENGL 312
  - 15-17 credit hours of Honors variants of General Education Program courses from an approved list
  - 6 credit hours of interdisciplinary Honors Seminar(s) or 6 credit hours of Honors Seminar/Thesis
- Honors students must earn a 3.0 average in all courses applied to meet Honors requirements and have at least a 3.0 cumulative grade point average upon graduation.
  - ENGL 111 is required of all students entering the Honors Program as first semester students. Students electing to join this program after their first semester are required to take ENGL 312.
  - Students entering the program as first semester students are required to participate in an Honors section of ORIE 101 Introduction to Higher Education.
  - Thesis hours may, with departmental approval, count towards requirements in the major. Seminar credit hours may, with approval of the Honors Program Subcommittee, substitute for portions of the Liberal Arts Component of the General Education Program.

# International Studies

For Major

Total Hours Required:

63

## Major

### Tracks in

**international politics**  
**international business**  
**international economics**

### Coordinator:

George White, Associate Professor, Department of Geography

### Associate Coordinator:

Sally Boneice, Assistant Professor, Department of History

### Departmental Contacts:

#### Professors:

Neral (Economics), O'Brien (Foreign Languages and Literature)

#### Associate Professors:

Boneice (History), Serafin (Political Science), Shah (Business Management), G. White (Geography)

- The International Studies major is interdisciplinary in nature and allows you to choose among three tracks: International Business, International Politics and International Economics. The required core courses emphasize the interconnections among these three specializations and provide the solid foundation in history, politics, economics, and geography necessary both for the area of focus and future employment.
- You are strongly encouraged to combine this major with a second major, particularly in foreign languages. You may also wish to complete a minor in a foreign language to fulfill the Humanities (Group B) component of the General Education Program.

## Summary of Requirements for Major in International Studies

Major

### 1. Required Core Courses:

*(27 hours)*

INST 100 Intro. to International Studies  
ECON 201 Principles of Economics (Macro) *(GEP LAC Group D)*  
ECON 202 Principles of Economics (Micro)  
ECON 400 International Trade *or* ECON 401 International Finance  
GEOG 104 Human Geography *(GEP LAC Group D)*  
GEOG 407 Political Geography  
HIST 114 World History  
POSC 370 Introduction to Political Thought  
INST 491 Seminar in International Studies  
*Optional: (9-15 hours)* INST 492 Internship Seminar *and* INST 495 Internship in International Studies

### 2. Foreign Language:

*Students must complete the 200-level sequence 211-212-250 (or receive credit through advanced placement) and a 300-level course in a modern foreign language. Students are advised that an additional 6 credits in the language result in a minor. (Minor: GEP LAC Group B)*

### 3. Tracks:

*Complete one of the following tracks: (24 hours)*

#### Tracks in International Politics

##### **A. Required Courses (18 hours):**

HIST 428 Diplomatic History of the United States  
POSC 435 Model Organization of American States  
*or* POSC 333 Politics of Western Europe  
POSC 342 Foreign Policy of the United States  
POSC 441 International Relations: Theory and Practice  
POSC 311 Research Methods  
*or* GEOG 380 Research Methods  
BUAD 100 Introduction to Business

##### **B. Elective Courses (6 hours):**

*Two from among the following:*

INST 492 Internship Seminar  
GEOG 401 Geography of Europe  
GEOG 402 Geography of Russia and the Former Republics  
HIST 341 The Modern & Contemporary Middle East  
HIST 404 Revolutionary and Soviet Russia  
HIST 451 Contemporary Latin America  
HIST 453 Contemporary Africa  
HIST 460 Modern & Contemporary Asia  
HIST 422 Diplomatic History of Europe, 1789-The Present  
PHIL 311 Asian & African Philosophy  
POSC 341 International Organization  
POSC 330 Politics of Africa  
POSC 331 Politics of Latin America  
POSC 332 Politics of Middle East  
POSC 334 Politics of Eastern Europe  
POSC 442 National Security Policy  
POSC 431 Russian Politics

#### Tracks in International Business

##### **A. Required Courses (18 hours):**

ACCT 100 Financial Accounting  
BUAD 351 Management of Organizations  
BUAD 361 Principles of Marketing

- An internship is optional but INST 492 may be used for elective credits in the International Politics and International Economics tracks.
- Only courses in which a grade of C or better is earned will count toward satisfaction of major requirements.
- You cannot minor in International Studies.

BUAD 370 Corporate Finance  
*or* BUAD 303 Principles of Finance  
 BUAD 330 International Business  
 POSC 113 Introduction to World Politics

**B. Elective Courses (6 hours):**

*Two from among the following:*

BUAD 450 International Management  
 BUAD 460 International Marketing  
 BUAD 470 International Financial Management

**Tracks in International Economics**

**A. Required Courses (12 hours):**

ECON 309 Comparative Economic Systems  
 ECON 400/401 International Trade *or* International Finance  
*(whichever is not taken as an International Studies core course.)*  
 ECON 405 Economic Growth and Development  
 BUAD 100 Introduction to Business  
*or* BUAD 351 Management of Organizations

**B. Elective Courses (12 hours):**

*Four from among the following:*

INST 492 Internship Seminar  
 ECON 450 Quantitative Economics  
*or* ECON 460 Econometrics  
*or* ECON 407 Business Cycles and Forecasting  
 ECON 300 History of Economic Thought  
 ECON 410 Resource and Environmental Economics  
 GEOG 300 Economic Geography  
 PHIL 308 Political Philosophy  
 POSC 330 Politics of Africa  
 POSC 331 Politics of Latin America  
 POSC 332 Politics of Middle East  
 POSC 333 Politics of Western Europe  
 POSC 334 Politics of Eastern Europe  
 POSC 435 Model Organization of American States  
 POSC 341 International Organization  
 POSC 441 International Relations: Theory and Practice

# Justice Studies

## Major

### Coordinator:

David Lewis, Associate Professor, Department of Political Science

### Participating Faculty:

#### Professors:

Connelly (Sociology and Social Work), T. Mappes (Philosophy), Simpson (Political Science)

#### Associate Professors:

J. Bambacus, D. Lewis, (Political Science), Crosby (Sociology), Kroeger-Mappes (Philosophy), Olson (Sociology)

#### Assistant Professors:

Hartlaub, S. Johnson (Political Science), Selby (Sociology)

- An internship is optional.
- Only courses in which a grade of C or better is earned will count toward satisfaction of major requirements.
- The justice studies major may be completed on the Frostburg campus or at the Hagerstown or Frederick Centers.
- You cannot minor in Justice Studies.

For Major

Total Hours Required:

48

The major in justice studies is an interdisciplinary program designed to provide a broad academic foundation and to prepare students for entry into careers in law, law enforcement, court administration or corrections. The major also prepares students for graduate study in law or criminal justice. The program examines law and the criminal justice system from institutional, administrative, behavioral and philosophical perspectives and encourages students to develop strong analytical and communication skills.

## Summary of Requirements for Major in Justice Studies

Major

### 1. Introductory Level Courses:

(9 hours)

POSC 110 Intro. to American Politics (*GEP LAC Group D*)  
 or POSC 112 Honors Intro. to American Politics (*GEP LAC Group D*)  
 SOCI 100 Intro. to Sociology (*GEP LAC Group D*)  
 or SOCI 111 Honors Intro. to Sociology (*GEP LAC Group D*)  
 PHIL 102 Contemporary Ethical Problems (*GEP LAC Group B*)  
 or PHIL 201 Ethics

### 2. Intermediate Level Courses:

(21 hours)

SOCI 200 Social Problems  
 or SOCI 203 Sociology of Deviant Behavior  
 SOCI 340 Criminology  
 POSC 321 American State & Local Politics  
 POSC 323 Public Administration  
 POSC 324 Criminal Justice Systems in Action  
 POSC 358 American Public Policy  
 or POSC 352 Interest Groups and Public Policy  
 ENGL 338 Technical Writing (*GEP BR Adv. Comp.*)

### 3. Advanced Level Courses:

(18 hours)

POSC 311 Research Methods  
 or SOCI 311 Basic Research Methods  
 SOCI 442 Juvenile Delinquency  
 SOCI 443 The American Correctional System  
 POSC 422 American Constitutional Law I  
 POSC 423 American Constitutional Law II  
 PHIL 410 Philosophy of Law  
 or PHIL 304 Social Philosophy

### 4. Internship:

(optional; 9 or 15 hours)

POSC 492 Internship Seminar  
 POSC 495 Internship in Political Science

# Law

## Bachelors/Juris Doctor Program

### Dual-degree program

#### Coordinator:

Scott Johnson, Assistant Professor, Department of Political Science

- Frostburg State University students may earn the last 29 of the 120 credit hours required by Frostburg State University for graduation at the University of Baltimore School of Law. The result of this Bachelors/Juris Doctor Program is that students may attain an undergraduate and a law degree in six years instead of the normal seven years.

## Law School Preparation

### Pre-professional program

#### Pre-law Advisor:

Scott Johnson, Assistant Professor, Department of Political Science

- While you cannot major or minor in law school preparation, there are law-related courses offered at Frostburg State University.
- Prospective law students should carefully examine the catalog of the law school they wish to attend in order to determine the test requirements for that school.

Hours Required at Frostburg State University	91
Hours Required at University of Baltimore School of Law	29
<b>Total Hours Required:</b>	<b>120</b>

### Summary of Requirements at FSU for the Bachelors/Juris Doctor Program

1. Complete 91 credit hours with Frostburg State University.
2. Complete all of Frostburg State University's general education requirements.
3. Maintain cumulative grade point averages as required at FSU for the academic major and overall course work.
4. Complete all requirements for an academic major at Frostburg State University.
5. Be accepted by the University of Baltimore School of Law into its early admission program.
6. Attain the Bachelor's degree from Frostburg State University upon transferring 29 credits from the University of Baltimore School of Law.

In addition it is recommended that students meet the following criteria:

1. Maintain a grade point average of 3.3 or above at Frostburg State University to enhance the chances for acceptance by the University of Baltimore School of Law.
2. Complete one of the following majors at Frostburg State University: economics, French, geography, history, justice studies, philosophy, political science, psychology, sociology, or Spanish. Other majors are possible, but may require the completion of more than 91 credit hours.

The traditional preparatory majors for entering law schools have been political science, history, English, philosophy, or sociology. Most law schools prefer that undergraduates interested in admission to law school *not* follow a prescribed "*pre-law*" curriculum. Rather, they prefer that students pursue a broad, *liberal* education.

Almost all professional law schools require applicants to take the Law School Aptitude Test. In some cases, the Graduate Record Exam may also be required. Information regarding the L.S.A.T. may be obtained from this university's pre-law advisor. Information regarding the G.R.E. may be obtained from University Counseling and Psychological Services.

Prospective law students should strive to acquire exceptional ability in communication; gain critical understanding of human values and institutions; and develop understanding in the use of various types of reasoning: deductive, inductive, and analogous. Students should develop the ability to think creatively and to analyze critically. They should also learn how to recognize, differentiate, and organize facts according to their relevance to particular issues.

### Suggested Elective Courses for Law School Preparation

The following courses may be especially helpful in achieving the qualities stated above. Students are advised to choose elective courses from this list:

BUAD 291	Legal Environment of Business	ENGL 338	Technical Writing
CMST 122	Intro. to Public Speaking	GEOG 450	Urban Planning
CMST 225	Interviewing	GEOG 473	Environmental Law
CMST 302	Argumentation & Advocacy	HIST 103,104	History of U.S. I, II
CMST 322	Presentational Communication	PHIL 102	Contemporary Ethical Problems
CMST 451	Seminar in Communication Theory	PHIL 205	Logic
ECON 307	Govt. and Business	PHIL 410	Philosophy of Law
ECON 404	Public Finance	POSC 324	Criminal Justice Systems in Action
ENGL 330	Business Writing	POSC 422,423	American Constitutional Law I, II
ENGL 334	Creative Writing	SOCI 200	Social Problems
ENGL 336	Journalistic Writing	SOCI 443	The Amer. Correctional System

# Leadership Studies

## Minor

### Coordinator:

Ruth Wallinger, Lecturer,  
Department of  
Communication Studies

### Participating Faculty:

#### Professor:

Connelly (Sociology and  
Social Work)

#### Associate Professor:

Powell (Social Work)

#### Lecturers:

Bowling (Student and  
Educational Services,  
Mandicott (Student and  
Educational Services),  
Wallinger (Communication  
Studies)

- The Leadership Minor is open to any student seeking theoretical and experiential knowledge regarding leadership. It is not necessary to be in leadership roles on or off campus.
- Course work in the minor is best begun in the sophomore year, though it is accessible to juniors as well.
- This minor entails a substantial number of experiential learning activities.
- Only courses in which a grade of C or better is earned will count towards satisfaction of the minor requirements.
- You cannot major in Leadership Studies.

For Minor

Total Hours Required:

19

## Summary of Requirements for Minor in Leadership Studies

Minor

### 1. Required Core Courses:

*(13 credits)*

CMST 102 Introduction to Human Communication  
LEAD 150 The Citizen Leader  
LEAD 201 Leadership Studies: Theory and Practice  
LEAD 494 Practicum in Leadership Studies

### 2. Leadership Values and Skills

*(3 credits)*

*Select one of the following courses:*

BUAD 356 Leadership and Interpersonal Skills  
CMST 215 Small Group Communication  
CMST 300 Interpersonal Communication  
CMST 302 Presentational Communication  
CMST 335 Organizational Communication  
PHIL 201 Ethics  
PHIL 304 Social Philosophy  
PHIL 314 Business Ethics  
POSC 462 Personality and Politics  
PSYC 360 Industrial/Organizational Psychology  
PSYC 414 Theories of Personality  
PSYC 418 Social Psychology  
SOWK 375 Human Behavior and the Social Environment I  
SOWK/PSYC 385 Generalist Practice with Groups/Group Processes

### 3. Leadership Environments

*(3 credits)*

*Select one of the following courses:*

BUAD 351 Management of Organizations  
BUAD 359 Total Quality Management  
EDUC 405 Leadership  
HIST 406 20th Century African-American Leadership in the U.S.  
POSC 321 State and Local Politics  
POSC 323 Public Administration  
POSC 352 Interest Groups and Public Policy  
POSC 358 American Public Policy  
POSC 427 The American Presidency  
RECR 380 Recreational Leadership  
RECR 382 Program Planning  
SOCI 325 Community Analysis  
SOWK 370 Introduction to Social Welfare

# Liberal Studies

## Major

### Coordinator:

Philip Allen, Assistant to the Dean of the College of Liberal Arts and Sciences

- The Liberal Studies major is an integrative program providing breadth in the arts, humanities, natural and social sciences, and depth in an area of specialization.
- The major is adaptable to student interest in technical and/or professional studies and constitutes a desirable preparation for graduate training or for entry and advancement opportunities in a wide array of employment fields requiring a baccalaureate degree.
- Early Childhood/Elementary Education and Elementary Education majors should consult with their advisors about the advantages of a double major in Liberal Studies.
- Only courses in which a C or better is earned will count toward satisfaction of major requirements.

For Major

Total Hours Required:

48

## Summary of Requirements for Major in Liberal Studies

Major

### I. Liberal Core:

(21 hours)

*A minimum of 21 hours of course work in the arts and sciences in addition to courses satisfying General Education Program requirements, and distributed as follows:*

1. 3 hours in communication arts, chosen from CMST 102/112 or a second 300-level English writing course.
2. 18 hours in arts and sciences courses, including a minimum of 3 hours each in arts, humanities, natural sciences, and social sciences.

**NOTE:** Students seeking Maryland State teaching certification in Early Childhood and/or Elementary Education must complete specific courses within these categories; they should consult an advisor in the Department of Educational Professions.

### II. Focus Area Requirements (approval of LBST Coordinator required):

(27 hours)

- A. A minimum of 24 hours in a discipline or disciplines (including current minors) related to the student's area of technical or professional training or other specialized interest, including a minimum of 15 hours at the 300/400 level.
- B. A minimum of 3 hours in a Liberal Studies capstone course (seminar, individual research, practicum, or internship).

# Mass Communication

## Major

### Associate Professors:

Pack (Chair), Phipps

### Assistant Professor:

Lombardi

- Only courses in which you earn a grade of C or better may count towards satisfaction of major requirements.
- All grades earned in courses completed for the major in Mass Communication count in determining whether you meet the graduation requirement of a 2.0 cumulative grade point average in the major.
- All courses completed for the Mass Communication major count in determining whether one-half of the major is completed at FSU.

	For Major
Hours Required in Communication and Theatre Arts:	30 - 39
Hours Required in Other Departments:	15 - 24
<b>Total Hours Required:</b>	<b>54</b>

## Summary of Requirements for Major In Mass Communication

Major

### 1. Introductory/Prerequisite Courses:

(9 hours)

CMST 102 Introduction to Human Communication

MCOM 105 Introduction to Mass Communication

COSC 100 Introduction to Computer Science

### 2. Mass Communication Practice Courses:

(15 hours)

ART 207 Graphic Design

ENGL 336 Journalistic Writing

MCOM 212 Video Production Industry

MCOM 316 Telecommunications Management

MCOM 326 Writing for Electronic Media

### 3. Advanced Mass Communication Courses:

(15 hours)

ENGL 430 The Composing Processes

MCOM 336 Broadcast-Cable Programming

MCOM 346 Mass Communication Theory

MCOM 347 Telecommunications Law

MCOM 486 Current Issues and New Technology in Mass Communication

### 4. Practicum:

(3 hours)

You are required to participate in a three-credit Practicum. This requirement may be met by completing three credits of MCOM 494 Mass Communication Practicum, or by completing the graded academic portion of the internship course MCOM 492 Internship Project. If you design a Professional Focus emphasizing writing, you may also elect ENGL 494 Mass Communication Practicum.

### 5. Professional Focus:

(12 hours)

You will select an additional four courses to create a definable professional focus. *The Professional Focus you create requires the written approval of your advisor.*

You may select courses from a list of approved offerings in visual arts, business administration, computer science, English, political science, sociology, mass communication and theatre.

Examples of Professional Focus groupings you might create include emphases in advertising, management, performance, and audio or video production. Sample Focus programs are available through the MCOM Department office.

# Mathematics

## Major

## Minor

## Teaching Certification Option

### Professors:

Jones, K. Parks,  
Revenaugh (Chair),  
Weimer, E. White

### Associate Professors:

Elder, Hegde, Hughes,  
Lemmert

### Assistant Professors:

Barnet, Wojnar

### Instructor:

Michael

- You may major or minor in Mathematics
- You may elect the teaching certification option with required internship.
- Elementary Education students may elect a specialization in Mathematics.
- You may elect to focus in Mathematical Sciences (*see next section*). The Mathematical Sciences Focus is designed for mathematics, chemistry, and physics majors.
- The department offers an honors program.
- The discipline and/or education requirements for teaching certification may change as a result of NCATE program review requirements, or state or federal action. If you are interested in the teaching certification option, you should stay in close contact with the Department Chair or Coordinator and with the Department of Education Professions. It is to your advantage to complete an NCATE-approved program.

	For Major	For Minor	For Teaching Cert. Option
Hours Required in Mathematics:	39	18	39
Hours Required in Other Departments:	0	0	42.5
<b>Total Hours Required:</b>	<b>39</b>	<b>18</b>	<b>81.5</b>

## Summary of Requirements for Major/Minor in Mathematics

Major	Minor
<p><b>1. Basic Courses</b> (21 hours)</p> <p>MATH 226 Calculus I (<i>GEP BR Math</i>) MATH 227 Calculus II MATH 228 Calculus III MATH 320 Multivariable Calculus MATH 350 Matrix Algebra MATH 470 Mathematical Models MATH 491 Seminar in Mathematics</p>	<p>(9 hours)</p> <p>MATH 226 Calculus I (<i>GEP BR Math</i>) MATH 227 Calculus II MATH 228 Calculus III</p>
<p><b>2. Electives</b> (18 hours)</p> <p>Select from courses at the 300 or 400 level, except MATH 340 <i>Fundamental Concepts of Geometry</i>, MATH 483 <i>Theory of Interest</i>, MATH 485 <i>Actuarial Mathematics II</i>, or MATH 495 <i>Internship in Mathematics</i></p>	<p>(9 hours)</p> <p>Select from courses at the 300 or 400 level, except MATH 340 <i>Fundamental Concepts of Geometry</i>, MATH 483 <i>Theory of Interest</i>, MATH 485 <i>Actuarial Mathematics II</i>, or MATH 495 <i>Internship in Mathematics</i></p>

## Summary of Requirements for Major in Mathematics -Teaching Certification Option

### 1. Basic Core Curriculum

(21 hours)

MATH 226 Calculus I (*GEP BR Math*)  
MATH 227 Calculus II  
MATH 228 Calculus III  
MATH 320 Multivariable Calculus  
MATH 350 Matrix Algebra  
MATH 470 Mathematical Models and Applications  
MATH 491 Seminar in Mathematics

### 2. Mathematics Teaching Certification Option Requirements

(18 hours)

MATH 380 Introduction to Probability and Statistics  
MATH 437 Combinatorics and Graph Theory  
MATH 440 Modern College Geometry  
MATH 461 History of Mathematics  
MATH 465 Theory of Numbers  
MATH 415 Foundations of Mathematics  
or MATH 451 Modern Higher Algebra

### 3. Professional Education Sequence

(42.5 hours)

## Summary of Requirements for Teaching Certification

If you wish to complete a Maryland State approved program in teaching Mathematics, you must:

- Complete the BA/BS in Mathematics - Teaching Certification Option.
- Meet the phase admissions requirements summarized in the Educational Professions section.
- Complete the professional education sequence described in Education: Secondary School Programs

# Mathematical Sciences

	For Focus
Hours Required in Mathematics:	12
Hours Required in Other Departments:	12-13
<b>Total Hours Required:</b>	<b>24-25</b>

## Focus

### Coordinator:

Lance Revenaugh, Chair,  
Department of Mathematics

- You may elect to focus in Mathematical Sciences.
- The Mathematical Sciences Focus is designed for Mathematics, Chemistry, and Physics majors.
- You cannot major or minor in Mathematical Sciences.

## Summary of Requirements for Focus in Mathematical Sciences

### Focus

#### 1. Core Mathematics Courses:

(3 hours)

*From among:*

MATH 415 Foundations of Mathematics  
 MATH 425 Introduction to Real Analysis  
 MATH 440 Modern College Geometry  
 MATH 451 Modern Higher Algebra  
 MATH 452 Linear Algebra  
 MATH 460 Introductory Topology  
 MATH 465 Theory of Numbers

#### 2. Applied Mathematics:

(9 hours)

*From among:*

MATH 320 Multivariable Calculus  
 MATH 380 Introduction to Probability & Statistics  
 MATH 420 Advanced Calculus  
 MATH 426 Introduction to Complex Analysis  
 MATH 432 Differential Equations  
 MATH 435 Numerical Analysis  
 MATH 436 Mathematical Physics  
 MATH 437 Combinatorics & Graph Theory  
 MATH 470 Mathematical Models and Applications  
 MATH 480 Probability and Statistics  
 MATH 481 Applied Regression Analysis  
 MATH 492 Internship Seminar

#### 3. Required Courses in Other Departments:

##### Computer Science

(9 hours)

*From among:*

COSC 200 Computer Science I  
 COSC 201 Computer Science II  
 COSC 350 Computer Organization & Assembly Language  
 COSC 450 Programming Language Structures

##### Science

(3-4 hours)

PHYS 261 Principles of Physics I *or*  
 CHEM 441 Physical Chemistry

# Medical Technology Preparation

## Pre-professional program

### Coordinator:

Don Weser, Professor,  
Department of Chemistry

- You must complete at least 60 hours of academic preparation, exclusive of Health & Physical Education, before beginning the professional segment of this program.
- The Summary of Requirements will assist you in planning your first two years of study which fulfill the requirements of the University of Maryland, Baltimore and the National Accrediting Agency for Clinical Laboratory Science. Students interested in attending other institutions should consult their catalogs for specific entrance requirements.
- The Pre-Medical Technology Program is competitive and high-quality academic performance is expected.
- You cannot major or minor in Medical Technology Preparation.

For Pre-professional Program

Total Hours:

61

## Summary of Requirements for Pre-professional Program in Medical Technology

### 1. Biology:

(15 hours)

BIOL 149 General Biology I

BIOL 304 Microbiology

BIOL 350 Genetics

#### **Biology Elective - choose from the following:**

BIOL 150 General Biology II

BIOL 201 Anatomy and Physiology I

BIOL 202 Anatomy and Physiology II

BIOL 310 Cell Biology

### 2. Chemistry

(13 hours)

CHEM 101, 102 General Chemistry I, II

CHEM 301 Organic Chemistry I

### 3. English

(6 hours)

ENGL 101/111 Freshman Composition *or* ENGL 310 Advanced Composition

ENGL 150/250 Intro. to Literature *or* an Advanced English/American Literature Course

### 4. Humanities

(3 hours)

*Select a non-performing course from art, music, foreign language (2nd year or above), humanities, communication studies, theatre, philosophy.*

### 5. Mathematics

(6 hours)

MATH 102 College Algebra

MATH 209 Elements of Applied Probability and Statistics

### 6. Computer Science

(3 hours)

COSC 100 Intro. to Computer Science *or* an Advanced Computer Science Course

### 7. Social Sciences

(6 hours)

*Select courses from economics, geography, history, political science, psychology, sociology, African American studies.*

### 8. Electives

(9 hours)

Strongly recommended:

CHEM 302 Organic Chemistry II

PHYS 215 General Physics I *or* PHYS 261 Principles of Physics I

# Medicine Dentistry Optometry Veterinary Medicine Preparation

## Pre-professional programs

### Coordinator:

Mary Mumper, Chair,  
Health Professions Advisory  
Committee and Chair,  
Department of Chemistry

- Students applying for professional school should stay in contact with the Health Professions Advisory Committee. The committee interviews candidates for professional school and supplies a committee letter of recommendation to the applicants' prospective school. This procedure enhances the students' application prospects.

## Summary of Requirements for Medical, Dental, Optometry & Veterinary Medicine Pre-Health Professions Program

1. Students intending to enter health professions schools should plan their academic programs carefully to meet pre-professional, university and major requirements.
2. Pre-health professions students should continually examine the catalog of the institution they plan to attend in order to complete courses required by the professional school and to fulfill additional entrance expectations. Students should bear in mind that requirements change and they should maintain contact with any professional schools they want to attend.
3. A science major is not a prerequisite for medical school; therefore, a major should be selected in which the student has a high aptitude and interest and which provides career alternatives. A proper course selection is most important; consequently, we highly recommend early consultation with the chair of the department of your selected major, who will assign you to a pre-health professions advisor.
4. Most pre-health professions students at FSU select biology or chemistry as majors. The Pre-Health Professions Option outlined in the Biology section of this catalog should be selected by students majoring in Biology. Chemistry students planning medical school and other pre-health professional programs complete either the Biochemistry concentration or Traditional Track outlined for the Chemistry major. Students opting to minor in either department are advised to use sections 5 and 6 below as a guide to course selection.
5. Professional schools generally require a demonstrated proficiency in the basic sciences. The following courses are among the minimum requirements for students planning to prepare for medical, dental, optometry or veterinary school.

BIOL 149 <i>and</i> 150	General Biology I and II	8 cr.
CHEM 101 <i>and</i> 102	General Chemistry I and II	8 cr.
CHEM 301 <i>and</i> 302	Organic Chemistry I and II	10 cr.
PHYS 215, 216 <i>or</i> 261, 262	General Physics I, II <i>or</i> Principles of Physics I, II	8 cr.
MATH — 2 courses	*See options in #6	6 cr.

6. Some professional schools require and many recommend additional courses as minimal requirements. The following list should be used as a guide for course selection by students in any major.

BIOL 304	Microbiology	4 cr.
BIOL 302	Animal Physiology	4 cr.
BIOL 310	Cell Biology	4 cr.
BIOL 327	Comparative Anatomy	5 cr.
BIOL 350	Genetics	4 cr.
BIOL 404	Histology	4 cr.
BIOL 435	Molecular Biology	4 cr.
CHEM 320	Quantitative Analytical Chemistry	4 cr.
CHEM 441, 442	Physical Chemistry Lec. I & II	6 cr.
CHEM 455, 457	Biochemistry Lec. I & II	6 cr.
ENGL 338	Technical Writing	3 cr.
MATH 120	Pre-Calculus	3 cr.
MATH 226, 227, 228	Calculus I, II, III	9 cr.
MATH 209 <i>or</i> 380	Probability & Statistics	3 cr.
PHIL 313	Biomedical Ethics	3 cr.

7. Biochemistry I (CHEM 455) is an entrance requirement at the Virginia-Maryland Regional College of Veterinary Medicine.
8. Almost all professional schools require applicants to take certain standardized examinations.

Medical Schools	—	Medical College Admission Test (MCAT)
Dental Schools	—	Dental Admissions Test (DAT)
Optometry Schools	—	Optometry Admission Test (OAT)
Veterinary Schools	—	Graduate Record Exam (GRE)

You may obtain information about the tests from Career Services.

9. Due to the changing nature of health career preparation, please regularly check the Pre-Medical Committee's web page at <http://antoine.frostburg.edu/php/>.

# Music

	For Teaching Cert. Option Instru	Voc/Chor	For Major Concentrations Vocal Perform	Music Mgmt	For Major Tracks Piano Perform	Instru Perform	For Minor
Hours Required in Music:	63	63	67	65	66	66	23
Hours Required in Other Depts:	36.5	36.5	18-24	21	0	0	0
<b>Total Hours Required:</b>	<b>99.5</b>	<b>99.5</b>	<b>85-91</b>	<b>86</b>	<b>66</b>	<b>66</b>	<b>23</b>

## Major and minor

### Concentrations in: vocal performance music management

### Tracks in Performance: piano instrumental

### Teaching Certification Option

#### Professor:

Bauman, Grolman Schlegel  
(Chair)

#### Associate Professors:

Dixon Broyles, Soderberg

#### Assistant Professor:

Mills

- If you are an entering first-year or transfer student, you are required to pass an audition in your chosen performance area before being accepted as a Music major.
- At the end of the fourth semester, a review of progress will be made by the entire Music faculty before you are permitted to continue (sophomore evaluation).
- You must pass the piano proficiency exam by the end of your fourth semester.
- You must choose a concentration, a track or the teaching certification option.

## Summary of Requirements for Major/Minor in Music

Major	Minor
<b>1. Core Requirements:</b> (47-48 hours)	(23 hours)
<b>Music Theory:</b> (16 hours) MUSC 102 Theory I MUSC 103 Theory II MUSC 104 Aural Skills I MUSC 105 Aural Skills II MUSC 204 Theory III MUSC 205 Theory IV MUSC 206 Aural Skills III MUSC 207 Aural Skills IV	(8 hours) MUSC 102 Theory I MUSC 103 Theory II MUSC 104 Aural Skills I MUSC 105 Aural Skills II
<b>Music History &amp; Literature:</b> (9 hours) MUSC 110 World Music (GEP LAC A) MUSC 308 Music History I MUSC 309 Music History II	(6 hours) MUSC 308 Music History I MUSC 309 Music History II
<b>Ensemble:</b> (7-8 hours) <i>Select from:</i> MUSC 319 University Chorale MUSC 329 Marching Band: Concert Band MUSC 330 Concert Band: Wind Ensemble MUSC 335 String Ensemble MUSC 336 Chamber Guitar Ensemble	(3 hours) <i>Select from:</i> MUSC 319 University Chorale MUSC 329 Marching Band: Concert Band MUSC 330 Concert Band: Wind Ensemble MUSC 335 String Ensemble MUSC 336 Chamber Guitar Ensemble
<b>Piano Proficiency:</b> (0 hours) MUSC 415 Piano Proficiency Exam	
<b>Basic Conducting:</b> (3 hours) MUSC 303 Conducting I	
<b>Private Instruction:</b> (12 hours) MUSA 116-123 Private Instruction and/or MUSA 356-363 Private Instruction	(6 hours) MUSA 116-123 Private Instruction and/or MUSA 356-363 Private Instruction
<b>Student Recital:</b> MUSA 100 Student Recital <i>Required of all majors; no course credit.</i>	MUSA 100 Student Recital <i>Required of all minors; no course credit.</i>
<b>Senior Recital or Project:</b> MUSA 490 Senior Recital <i>Required of all majors; no course credit.</i>	

- The discipline and/or education requirements for teaching certification may change as a result of NCATE program review requirements, or state or federal action. If you are interested in the teaching certification option, you should stay in close contact with the Department Chair or Coordinator and with the Department of Education Professions. It is to your advantage to complete an NCATE-approved program.

## Summary of Requirements for the Teaching Certification Option in Music

### 1. Core Courses

(47 hours)

Required for all music majors; listed above.

### 2. Supplementary Requirements:

(4 hours)

Select from:

MUSA 116-123 Private Instruction

MUSA 356-363 Private Instruction

MUSC 319, 329, 330, 333 Ensembles

MUSA 104, 105, 203, 414 Class Piano

MUSA 106-112, 208-311 Class Instruments, Class Voice

### 3. Other Required Courses for K-12 Teaching Certification

(48.5 hours)

If you wish to complete a Maryland State approved program in teaching Music, you must:

- Complete the following additional courses in Music:
  - MUSC 404 Conducting II
  - MUSA 108 Class Instruments I: Strings
  - MUSA 208 Class Instruments II: Woodwinds
  - MUSA 209 Class Instruments III: Brass
  - MUSA 311 Class Instruments IV: Percussion
- If your performing area is instrumental, you must complete 2 credit hours from among the following:
  - MUSA 106, 107 Class Voice
  - MUSC 319 University Chorale
- If your performing area is vocal, you must complete MUSA 210 Diction
- Meet the phase admissions requirements summarized in the Educational Professions section.
- Complete the professional education sequence described in the Education: K-12 Programs.

## Summary of Requirements for the Vocal Performance Concentration

### 1. Core Courses

(48 hours)

Required for all music majors; listed above

### 2. Supplementary Requirements

(5 hours)

Select from:

MUSA 116-123 Private Instruction

MUSA 356-363 Private Instruction

MUSA 319, 329, 330, 333 Ensembles

MUSA 104, 105, 203, 414 Class Piano

MUSA 106-112, 208-311 Class Instruments, Class Voice

### 3. Other Requirements for Vocal Performance Majors

(14 hours)

MUSC 401 Form and Analysis

MUSC 407 Counterpoint

MUSA 390 Junior Recital

MUSA 391 or 392 Performance Seminar

MUSA 491 or 492 Performance Seminar

MUSC 413 Vocal Pedagogy

MUSC 210 Diction

### 4. Minor in Foreign Languages & Literature

(18-24 hours)

#### Summary of Requirements for Minor in Foreign Languages & Literature

The minor in French or Spanish consists of at least three 300- or 400-level courses (9 credit hours beyond the 250 course). Students minoring in a language who begin course work at the 300-level are required, through accelerated placement, to pay a fee of \$10.00 per credit hour for the 211, 212, and 250 courses. A minor in a foreign language meets Group B, GEP LAC. Extra courses may be used to fulfill Group E.

## Summary of Requirements for the Music Management Concentration

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### 1. Core Courses

*(47 hours)*

Required for all music majors; listed above.

### 2. Supplementary Requirements:

*(4 hours)*

*Select from:*

MUSA 116-123 Private Instruction

MUSA 356-363 Private Instruction

MUSC 319, 329, 330, 333 Ensembles

MUSA 104, 105, 203, 414 Class Piano

MUSA 106-112, 208-311 Class Instruments, Class Voice

### 3. Advanced Courses

*(14 hours)*

MUSC 358 The Business of Music and Arts Management

MUSC 356 Computer Music Technology

MUSC 495 Internship in Music Management

### 4. Required Courses in Other Departments (Business Administration Minor)

*(21 hours)*

BUAD 100 Introduction to Business

BUAD 303 Principles of Finance

BUAD 351 Management of Organizations

BUAD 356 Leadership and Interpersonal Skills

BUAD 361 Principles of Marketing

ACCT 100 Financial Accounting

ECON 200 Basic Economics (*GEP LAC Group D*)

## Summary of Requirements for the Instrumental/Piano Performance Track

---

### 1. Core Courses

*(48 hours)*

Required for all music majors; listed above

### 2. Supplementary Requirements

*(5 hours)*

*Select from:*

MUSA 116-123 Private Instruction

MUSA 356-363 Private Instruction

MUSA 319, 329, 330, 333 Ensembles

MUSA 104, 105, 203, 414 Class Piano

MUSA 106-112, 208-311 Class Instruments, Class Voice

### 3. Other Requirements

#### Instrumental Performance Majors

*(13 hours)*

MUSC 401 Form and Analysis

MUSC 407 Counterpoint

MUSA 390 Junior Recital

MUSA 391 or 392 Performance Seminar

MUSA 491 or 492 Performance Seminar

Three Class Instrument I-IV Courses:

1. From your instrument family

2. Supplemental instrument family

#### Piano Performance Majors

*(13 hours)*

MUSC 401 Form and Analysis

# Nursing Preparation

## Pre-professional program

### Coordinator:

Wayne Yoder, Professor,  
Department of Biology

- A liberal arts program is recommended as preparation for professional study in the field of Nursing, particularly if the student is interested in the additional career opportunities available to those earning a B.S. degree in Nursing.
- Prospective nurses interested in a B.S. degree from a school of nursing may take a two-year program at Frostburg. It is expected that each student enrolled in the pre-nursing program will earn and maintain a **minimum 3.2** cumulative grade point average.
- You cannot major or minor in Nursing Preparation.

MUSC 407 Counterpoint  
MUSA 390 Junior Recital  
MUSA 391 or 392 Performance Seminar  
MUSA 491 or 492 Performance Seminar  
MUSA 213 Piano Pedagogy  
MUSC 325 Accompanying

For Pre-professional Program

Total Hours Required:

63

The following pre-professional courses are required for students interested in the University of Maryland, Baltimore School of Nursing and could also be taken, together with additional requirements, by students interested in attending other schools of nursing.

## Summary of Requirements for Pre-professional Program in Nursing

### 1. Biology:

(16 hours)

BIOL 149 General Biology I  
BIOL 201 Anatomy & Physiology I  
BIOL 202 Anatomy & Physiology II  
BIOL 304 Microbiology

### 2. Chemistry:

(8 hours)

CHEM 101 General Chemistry I  
CHEM 102 General Chemistry II (*The University of Maryland, Baltimore only requires CHEM 101.*)

### 3. English:

(6 hours)

ENGL 101 Freshman Composition  
ENGL 338 Technical Writing  
*or* ENGL 339 Scientific Writing

### 4. Humanities:

(9 hours)

*Must include courses from at least three of the following disciplines:*

English (literature courses), history, philosophy, foreign languages, music/art (history and/or appreciation)

### 5. Social Sciences

(12 hours)

PSYC 150 General Psychology  
PSYC 210 Child Development  
PSYC 212 Adolescence and Adulthood  
SOC 100 Introduction to Sociology

### 6. Other Required Courses:

(9 hours)

CMST 102 Introduction to Human Communication  
HEED 200 Nutrition (*to be taken in Spring of 2nd year*)  
MATH 102, MATH 103 or MATH 209. MATH 209 strongly recommended as the best math course to take by Univ. of MD School of Nursing.

# Occupational Therapy Preparation

## Pre-professional program

### Coordinator:

David Morton, Chair,  
Department of Biology

- All candidates are expected to earn and maintain **at least a 3.0** cumulative grade point average in order to be considered competitive for the program.
- Only the top 36 candidates, from all institutions offering prerequisite courses, will be considered for admission to the Occupational Therapy Program at Towson University. You can apply anytime you meet the application requirements.
- If you currently hold a baccalaureate degree, you don't have to meet Towson's GenEd requirements. See the current Towson University catalog for more details.
- You cannot major or minor in Occupational Therapy Preparation.

For Pre-professional Program

Total Hours:

62

The following courses are prerequisites for students interested in the Occupational Therapy Program at Towson University. These courses may also be taken, together with additional requirements, by students interested in completing a professional occupational therapy program at other institutions.

- Candidates for the Occupational Therapy Program at Towson University must complete three prerequisite courses (biology and two out of three other courses: English, psychology or sociology) with grades of B or better and a minimum of 14 total credits by the end of the fall semester prior to the year for which application is made.
- In addition, 30 hours of voluntary/work experience in human services activities are required prior to application, by March 1.
- By May 30, applicants must have completed PHYS 215 with a grade of C or better, and all remaining prerequisite courses with a grade of B or better.
- A minimum of 23 credits that meet Towson's GenEd requirements must have been completed prior to the beginning of the first semester of the Occupational Therapy Program. BIOL 149, ENGL 101/111, MATH 209/219, PHYS 215/261 and SOCI 100/111 all meet Towson's GenEd requirements.

## Summary of Requirements for Pre-professional Program in Occupational Therapy

### 1. Prerequisite Courses:

(17 hours)

BIOL 149 General Biology I  
ENGL 101/111 Freshman Composition  
PSYC 150/151 General Psychology  
SOCI 100/111 Intro. to Sociology  
PHYS 215 General Physics *or* PHYS 261 Principles of Physics I: Mechanics

### 2. Other courses that meet Towson's GenEd requirements:

*Select one course per group. Take no more than three courses from the same discipline. Courses with asterisks are also FSU GEP courses.*

- ART 110 Visual Imagery\*  
*or* THEA 107 Introduction to Theatrical Vision\*  
THEA 110 Introduction to Acting  
COSC 330 Web Design and Development  
DANC 342 Modern III  
ENGL 334 *or* ENGL 335 Creative Writing Fiction/Poetry
- ENGL 261 American Literature: Colonial to Present  
HIST 100/111 The Contemporary World in Historical Perspective\*  
HIST 103, 104 History of the United States  
MUSC 110 Intro. to World Music\*  
MUSC 311 History of Jazz  
DANC 110 Dance Appreciation\*
- Select a course from a different discipline than the one chosen in section b. above*  
ART 100/111\*\* Art Appreciation\*  
ENGL 313 English Romantic Literature  
PHIL 101/111 Intro. to Philosophy\*  
FREN 101, 102 Basic Elements of French I, II  
HIST 306 Medieval Europe  
HIST 310 Ancient Greece and Rome  
SPAN 101, 102 Basic Elements of Spanish I, II
- AAST 200 Introduction to African American Studies  
ENGL 231 African American Literature  
FREN 211, 212 French Grammar, Composition & Conversation I, II  
SPAN 211, 212 Spanish Grammar, Composition & Conversation I, II  
WMST 201 Introduction to Women's Studies

### 3. Other transferable program requirements:

(up to 20 hours)

BIOL 201, 202 Anatomy & Phys. I, II  
MATH 209/219 Elem. Applied Prob. & Stat.  
PSYC 210 and 212 Child, Adolescent & Adulthood  
PSYC 417 Psychology of Abnormal Behavior

\*FSU GEP courses

# Pharmacy Preparation

## Pre-professional program

### Coordinator:

Don Weser, Professor,  
Department of Chemistry

- The following 2-to-3 year pre-professional course pattern is suggested for students particularly interested in the University of Maryland, Baltimore School of Pharmacy. Students interested in attending other schools of pharmacy should consult their catalogs for specific entrance requirements.
- Each student enrolled in the pre-pharmacy program must earn and maintain a **minimum 3.00** cumulative grade point average.
- The Pharmacy College Admissions Test (PCAT) is also required and should be taken in the fall semester of the student's last year of study at FSU.
- For students who want to earn a baccalaureate degree at FSU before applying to a school of pharmacy, a major in chemistry or biology is appropriate.

# Philosophy

## Major

## Minor

### Professors:

Bucchino, Mappes  
(Coordinator)

### Associate Professor:

Kroeger-Mappes

### Assistant Professors:

Brill, Makang

For Pre-professional Program

Total Hours:

64

## Summary of Requirements for Pre-professional Program in Pharmacy

### 1. Biology

(8 hours)

BIOL 149 General Biology I

BIOL 304 Microbiology

### 2. Chemistry

(18 hours)

CHEM 101, 102 General Chemistry I, II

CHEM 301, 302 Organic Chemistry I, II

### 3. English

(6 hours)

ENGL 101 Freshman Composition

ENGL 310 Advanced Composition

or ENGL 338 Technical Writing or ENGL 339 Scientific Writing

### 4. Mathematics

(6 hours)

MATH 209 Elements of Applied Probability and Statistics

or MATH 380 Introduction to Probability and Statistics

and MATH 226 Calculus I

### 5. Physics

(8 hours)

PHYS 215, 216 General Physics I, II

or PHYS 261, 262 Principles of Physics I, II

### 6. Humanities

(6 hours)

### 7. Social Sciences

(6 hours)

### 8. Humanities/Social Science Electives

(6 hours)

	For Major	For Minor
Hours Required in Philosophy:	30	18
Hours Required in Other Departments:	0	0
Total Hours Required:	30	18

## Summary of Requirements for Major/Minor in Philosophy

Major	Minor
<b>1. Introductory Level Courses:</b>	
(6 hours)	(6 hours)
<i>Select two from:</i>	<i>Select two from:</i>
PHIL 101 Introduction to Philosophy (GEP LAC Group B)	PHIL 101 Introduction to Philosophy (GEP LAC Group B)
or PHIL 111 Honors: Introduction to Philosophy (GEP LAC Group B)	or PHIL 111 Honors: Introduction to Philosophy (GEP LAC Group B)
PHIL 102 Contemporary Ethical Problems (GEP LAC Group B)	PHIL 102 Contemporary Ethical Problems (GEP LAC Group B)
PHIL 201 Ethics	PHIL 201 Ethics
PHIL 205 Logic	PHIL 205 Logic

# Physical Therapy Preparation

## Pre-professional program

### Coordinator:

Joseph Hoffman, Associate  
Dean, College of Liberal  
Arts and Sciences

- Professional schools *differ substantially* in their requirements for admission and it is the responsibility of the student to ensure the completion of the necessary pre-physical therapy courses for the professional schools of interest.
- You are expected to earn and maintain at least a 3.00 cumulative grade point average.
- Physical Therapy experience as volunteer or aide is required (100-200 hours) as is a current CPR certificate.
- You cannot major or minor in pre-physical therapy.
- Application requirements for the University of Maryland Baltimore include:
  - Bachelor's degree (any major)
  - Successful completion (C or better) of the 52 specified credit hours or prerequisite course work
  - Submission of GRE scores.

### 2. History of Philosophy:

(6 hours)

PHIL 202 History of Philosophy: Ancient & Medieval

PHIL 203 History of Modern Philosophy

### 3. Distribution within Department:

(15 hours)

Select from courses at the 300 or 400 level.

(9 hours)

Select from courses at the 300 or 400 level.

### 4. Elective Hours in Department:

(3 hours)

(3 hours)

The following pre-professional courses are required of students interested in the University of Maryland Baltimore's Physical Therapy Program. Students interested in attending other professional schools should work closely with the coordinator of the Physical Therapy Preparation program to plan an appropriate program.

## Summary of Requirements for Pre-professional Program in Physical Therapy

### 1. Arts, History and Humanities

(3 hours)

CMST 102 Introduction to Human Communication

### 2. Biology

(12 hours)

BIOL 149 General Biology I

BIOL 201 Anatomy and Physiology I

any 300- or 400-level biology course with lab

### 3. Chemistry

(8 hours)

CHEM 101 General Chemistry I

CHEM 102 General Chemistry II

### 4. English

(3 hours)

ENGL 101 Freshman Composition

### 5. Mathematics

(9 hours)

MATH 209 Elements of Applied Probability & Statistics

MATH 220 Calculus for Applications I

or MATH 226 Calculus I

or MATH 120 Precalculus

SOCI 310 Statistics for Social Science

### 6. Physics

(8 hours)

PHYS 215 General Physics I

PHYS 216 General Physics II

### 7. Psychology

(9 hours)

PSYC 150 General Psychology

PSYC 210 Child Development

PSYC 212 Adolescence & Adulthood

### 8. Electives

(3 hours)

Choose one of the following:

ENES 102 Statics

ENES 221 Dynamics

PHEC 301 Biomechanics for Teacher Education

PHEC 303 Biomechanics for Exercise and Sport Science

PHEC 407 Motor Learning & Performance

# Physics

## Major

## Minor

### Tracks in:

**traditional physics  
engineering physics**

### Teaching Certification Option

#### Professor:

Hoffman, Luzader, Plitnik

#### Associate Professors:

Doyle, Latta, Tam

#### Assistant Professor:

Deng-Luzader, Soysal  
(Chair), Thamire

- You may not use courses listed under the heading Physical Science to satisfy the requirements of a major or minor in Physics.
- FSU and the University of Maryland Baltimore County offer a BS/MS program in Applied Physics. (See the next page of this catalog for more details).
- For engineering programs offered by the Dept. of Physics and Engineering, see the Engineering section of this catalog.
- The discipline and/or education requirements for teaching certification may change as a result of NCATE program review requirements, or state or federal action. If you are interested in the Teaching certification Option, you should stay in close contact with the department chair or coordinator and with the Educational Professions Department. It is to your advantage to complete an NCATE-approved program.
- The Traditional Physics track is recommended if you plan to attend graduate school.

	For Major	For Minor	For Teaching Cert. Option
Hours Required in Physics:	39	21	39
Hours Required in Other Departments:	21-22	6	63.5-64.5
Total Hours Required:	60-61	27	102.5-103.5

## Summary of Requirements for Major/Minor in Physics

Major	Minor
<p><b>1. Introductory Level Courses:</b> (8 hours) PHYS 261 Principles of Physics I: Mechanics (GEP LAC Group C) PHYS 262 Principles of Physics II: Electricity &amp; Magnetism</p> <p><b>2. Advanced Courses:</b> (22 hours) PHYS 263 Principles of Phys. III: Sound/Light PHYS 264 Principles of Physics IV: Thermodynamics &amp; Modern Physics PHYS 310 Classical Mechanics PHYS 312 Electricity &amp; Magnetism PHYS 320 Experimental Physics PHYS 400 Senior Research &amp; Seminar PHYS 491 Seminar</p> <p><b>3. Required Courses in Other Departments:</b> (21-22 hours) <i>One of the following:</i> COSC 200 Computer Science I or ENEE 114 Programming Concepts for Engineers <i>All of the following:</i> ENES 100 Intro. to Engineering Design MATH 226 Calculus I (GEP BR Math) MATH 227 Calculus II MATH 228 Calculus III MATH 320 Multivariable Calculus MATH 432 Differential Equations</p> <p><b>4. Choice of Track:</b> (9 hours) <i>Majors must choose a track in:</i> <b>Traditional Physics or Engineering Physics</b> (requirements listed below)</p>	<p>(8 hours) PHYS 261 Principles of Physics I: Mechanics (GEP LAC Group C) PHYS 262 Principles of Physics II: Electricity &amp; Magnetism</p> <p>(13 hours) PHYS 263 Principles of Phys. III: Sound &amp; Light PHYS 264 Principles of Physics IV: Thermodynamics &amp; Modern Physics PHYS 320 Experimental Physics <i>One additional 300-400 level physics or engineering course</i></p> <p>(6 hours) MATH 226 Calculus I (GEP BR Math) MATH 227 Calculus II</p>

## Summary of Requirements for Traditional Physics Track

- 1. Courses required for all majors:**  
(51-52 hours)  
Listed above.
- 2. Advanced Courses in the Department:**  
(9 hours)  
PHYS 311 Thermodynamics  
PHYS 417 Quantum Physics  
*One additional physics elective at the 300 level or above*

# Applied Physics

## Bachelor's/Master's Collaborative Program

### Dual-degree Program

#### Coordinator:

Oguz Soysal, Chair  
Department of Physics and  
Engineering

- Frostburg State University students may apply three FSU physics courses (nine credit hours) towards an undergraduate degree in Physics from FSU and towards a master's degree in Applied Physics from the University of Maryland, Baltimore County. The three courses which have UMBC equivalents are:
  - PHYS 312
  - PHYS 313
  - PHYS 417
- Since the Applied Physics program at UMBC normally requires 30 credit hours of graduate work, a student in the BS/MS program will be required to complete a minimum of only 141 hours to earn both the BS and MS degrees.

## Summary of Requirements for Engineering Physics Track

### 1. Courses required for all majors:

(51-52 hours)

Listed above.

### 2. Elective Hours in the Department: (9 hours)

With permission of the Department Chair, as many as 6 credits of mechanical engineering or electrical engineering at the 200 level or above may be applied.

## Summary of Requirements for Teaching Certification Option in Physics

If you wish to complete a Maryland State approved program in teaching Physics, you must:

- Complete the BA/BS in Physics - Traditional Physics Track.
- Meet the phase admissions requirements summarized in the Educational Professions section.
- Complete the professional education sequence described in Education: Secondary School Programs.

Hours Required at FSU	120
Hours Required at UMBC	21
Total Hours Required	141

## Summary of Program Requirements at FSU:

1. Completion of all requirements for the physics major at Frostburg State University.
2. Completion of the following FSU courses as physics electives: PHYS 313 and PHYS 417.
3. Completion of all Frostburg State University general education and basic baccalaureate requirements.
4. Completion of a total of at least 120 semester hours at FSU.

## Requirements for Formal Admission to the Program through UMBC:

1. An application submitted to the FSU Physics Department Chair at the beginning of the junior year. This will include an application form, undergraduate transcripts and three letters of recommendation.
2. A minimum cumulative grade point average of 3.0.
3. Formal application to the UMBC Graduate School for admission to the Applied Physics MS program by December of the senior year. Application procedures are described in the UMBC Graduate Catalog.

# Political Science

## Major

## Minor

### Professors:

Bowman, Simpson

### Associate Professors:

Bambacus (Acting Chair),  
Serafin, D. Lewis, O'Rorke,

### Assistant Professors:

R. Alexander, Hartlaub, S.  
Johnson, Twing

- Only courses in which you earn a grade of C or better will count towards satisfaction of major or minor requirements.
- Required exit examination administered by department every semester.
- An internship is optional. POSC 492 counts as elective credit toward POSC major; POSC 495 counts as general elective credit.

*\*Seminar courses may be applicable to the distribution requirements with the prior approval of the department chair.*

	For Major	For Minor
Hours Required in Political Science:	39	21
Hours Required in Other Departments:	0	0
<b>Total Hours Required:</b>	<b>39</b>	<b>21</b>

## Summary of Requirements for Major/Minor in Political Science

Major	Minor
<p><b>1. Introductory Level Courses:</b> (6 hours) POSC 110 Introduction to American Politics (GEP LAC Group D) or POSC 112 Honors Intro. to American Politics (GEP LAC Group D) and one of the following: POSC 113 Introduction to World Politics (GEP LAC Group D) or POSC 114 Honors Intro. to World Politics (GEP LAC Group D) or POSC 131 Introduction to Comparative Politics</p> <p><b>2. Research Methods:</b> (3 hours) POSC 311 Research Methods</p> <p><b>3. Distribution within Department:</b> (24 hours) Select <b>three</b> courses in <b>one</b> of the following 6 groups, and <b>one</b> course in each of the remaining 5 groups.* <b>GROUP I American Political Institutions</b> POSC 321 American State &amp; Local Politics POSC 323 Public Administration POSC 324 Criminal Justice Systems in Action POSC 421 American Legislative Politics POSC 422 American Constitutional Law I POSC 423 American Constitutional Law II POSC 427 The American Presidency <b>GROUP II Comparative Politics</b> POSC 330 Politics of Africa POSC 331 Politics of Latin America POSC 332 Politics of Middle East POSC 333 Politics of Western Europe POSC 334 Politics of Eastern Europe POSC 431 Russian Politics POSC 435 Model Organization of American States <b>GROUP III International Politics and Foreign Policy</b> POSC 341 International Organization POSC 342 Foreign Policy of the United States POSC 441 International Relations: Theory and Practice POSC 442 National Security Policy <b>Group IV Policy Studies</b> POSC 352 Interest Groups and Public Policy POSC 358 American Public Policy POSC 450 Environmental Public Policy POSC 456 Urban Politics and Policies <b>GROUP V Political Behavior</b> POSC 361 Public Opinion and Political Behavior POSC 362 Political Parties and Elections POSC 363 Media and Politics POSC 365 Women and Politics POSC 462 Personality and Politics <b>GROUP VI Political Theory</b> POSC 370 Introduction to Political Thought POSC 470 Seminar in Political Thought POSC 471 American Political Thought</p> <p><b>4. Free Elective Hours in Department:</b> (6 hours)</p>	<p>(6 hours) POSC 110 Introduction to American Politics (GEP LAC Group D) or POSC 112 Honors Intro. to American Politics (GEP LAC Group D) and one of the following: POSC 113 Introduction to World Politics (GEP LAC Group D) or POSC 114 Honors Intro. to World Politics (GEP LAC Group D) or POSC 131 Introduction to Comparative Politics</p>
	(15 hours)

# Psychology

	For Major	For Minor
Hours Required in Psychology:	33-34	18-21
Hours Required in Other Departments:	16	0
<b>Total Hours Required:</b>	<b>49-50</b>	<b>18-21</b>

## Major

## Minor

### Certificate in Child and Family Psychology

#### Professors:

Baxter, Bristow, Ross,  
Santoro, Southerly

#### Associate Professors:

Bensley, Edwards, Herzog  
(Chair), Peterson

#### Assistant Professors:

Bradley, Buckner, Redmond

- Majors may elect a pre-professional option, an internship option and/or a child and family certificate.
- Only psychology courses in which you earn a grade of C or better will count towards satisfaction of major and minor requirements.
- Psychology faculty also coordinate the Addictions Counseling Certificate and the Addictions Counseling Preparation program (see separate section of this catalog).

### Summary of Requirements for Major/Minor in Psychology

Major	Minor
<p><b>1. Introductory Course:</b> (3 hours) PSYC 150 General Psychology or PSYC 151 Honors: General Psychology (GEP LAC Group D)</p>	<p>(3 hours) PSYC 150 General Psychology or PSYC 151 Honors: General Psychology (GEP LAC Group D)</p>
<p><b>2. Research Methods:</b> (8 hours) PSYC 300 Research Methods I PSYC 301 Research Methods II</p>	<p>(3 hours) PSYC 311 Survey of Research Methods in Psych. or a departmentally approved research methods course substitution</p>
<p><b>3. Distribution within Department:</b> (12-13 hours) Select one course in each of four groups.</p> <p><b>GROUP I Developmental</b> PSYC 210 Child Development PSYC 212 Adolescence and Adulthood</p> <p><b>GROUP II Physiological Basis of Behavior</b> PSYC 306 Sensation and Perception PSYC 386 Drugs and Human Behavior PSYC 420 Physiological Psychology PSYC 430 Health Psychology</p> <p><b>GROUP III Learning</b> PSYC 307 Experimental Analysis of Behavior PSYC 409 Human Learning and Cognition PSYC 485 Behavioral Approaches to Human Problems</p> <p><b>GROUP IV Personality/Social</b> PSYC 414 Theories of Personality PSYC 417 Psychology of Abnormal Behavior PSYC 418 Social Psychology PSYC 489 Child and Adolescent Disorders</p>	<p>(0 hours)</p>
<p><b>4. Elective Hours in Department:</b> (6 hours) 2 additional courses, at least one of which must be at the 300 or 400 level</p>	<p>(12-15 hours) 4 additional courses, at least two of which must be at the 300 or 400 level <b>OR</b> 5 additional courses, at least two of which must be at the 300 or 400 level if a course outside of psychology has been substituted for the Research Methods requirement.</p>
<p><b>5. Introduction to the Profession of Psychology:</b> (1 hour) PSYC 297 Introduction to the Profession of Psychology</p>	
<p><b>6. Senior Integrative Experience:</b> (3 hours minimum) Select one of the following: PSYC 497 Senior Seminar PSYC 481 History and Systems of Psychology Preprofessional Option Internship Option</p>	
<p><b>7. Required Courses in Other Departments</b> (16 hours) CMST 102/112* Introduction to Human Communication or CMST 122 Introduction to Public Speaking COSC 100/110* Introduction to Computer Science</p>	

\* Honors equivalent

MATH 209/219\* Elements of Applied Probability and Statistics (*GEP BR Math*)  
 BIOL 109 Human Biology and the Environment *or* BIOL 149 General Biology I (*GEP LAC Group C*)  
 ENGL 308 Social Sciences Advanced Composition *or* ENGL 310/312\* Advanced Composition  
*or* ENGL 338 Technical Writing (*GEP BR Adv. Comp.*)

### Requirements for Preprofessional Option

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1. **Complete Psychology major** - described above.  
You must have a minimum 3.0 grade point average in the major.
2. **Required Course Work in Psychology:**  
 PSYC 420 Physiological Psychology (*may be used to satisfy Group requirements for the major above.*)  
*The following may be used to satisfy elective requirements for the major above:*  
 PSYC 470 Advanced Experimental Psychology  
 PSYC 481 History and Systems of Psychology  
 PSYC 499 Psychology Projects (*with senior thesis and oral presentation*).
3. **Attendance at a Preprofessional Orientation Meeting.**

### Requirements for Internship Option

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1. **Complete the Psychology major** - described above.  
You must have a minimum 3.0 grade point average in the major; or if your psychology GPA is between 2.75 and 3.0, you must pass a comprehensive examination covering all areas of psychology.
2. **Required Background in Psychology:**  
Pass a departmental ethics examination and complete specific courses required for different types of internships. (See the department guide.)
3. **Internship Orientation Meetings:**  
Attend 2 internship orientation meetings: 1 at least 2 semesters before interning, and 1 in the semester preceding the internship.
4. **Complete a resumé and an internship proposal.**
5. **Complete PSYC 495 Internship in Psychology with a grade of P and PSYC 492 Internship Seminar with a C or better.**

### Requirements for Child and Family Psychology Certificate

1. **Complete Psychology major** - described above.
2. **Required Course work in Psychology that must be taken in sequence (12 hours minimum):**  
*(May be used to satisfy group and elective requirements for the major above)*
  - A) PSYC 150/151 General Psychology
  - B) PSYC 210 Child Development *or* PSYC 212 Adolescence and Adulthood
  - C) PSYC 489 Child and Adolescent Disorders
  - D) **One of the following 400 level learning experiences:**  
 PSYC 404 Psychology of the Exceptional Child  
 PSYC 490 Special Topics in Psychology involving children and/or adolescents  
 PSYC 492/495 Internship in Psychology involving children and/or adolescents  
 PSYC 498 Readings in Psychology involving children and/or adolescents  
 PSYC 499 Psychology Projects involving research concerning children and/or adolescents
3. **Attendance at a Child and Family Psychology Certificate Orientation Meeting.**  
Attend at least one child and family orientation meeting in a semester prior to taking PSYC 489 Child and Adolescent Disorders.
4. **Recommended Additional Courses:**
  - A) PSYC 303 Psychology of Marriage
  - B) PSYC 485 Behavioral Approaches to Human Problems
5. **A certificate of completion of the Child and Family Psychology program will be awarded to Psychology majors who complete the above requirements.**

# Public Relations

For Minor

Total Hours Required:

24

## Summary of Requirements for Minor in Public Relations

Minor

### Minor

#### Coordinator:

A. Franklin Parks,  
Professor, Department of  
English

#### Participating Faculty:

##### Professors:

A.F. Parks (English),  
Routhier (Communication  
Studies)

##### Associate Professor:

Sattinger (Visual Arts)

##### Assistant Professors:

LaFief (Business  
Management), Lombardi  
(Mass Communication),  
Truman (Visual Arts)

- You cannot major in Public Relations.

#### 1. Courses in Communication Studies:

*(6 hours)*

CMST 300 Interpersonal Communication  
*or* CMST 322 Presentational Communication  
CMST 312 Language Behavior and Communication

#### 2. Courses in English:

*(6 hours)*

ENGL 336 Journalistic Writing  
ENGL 436 Advanced News and Feature Writing

#### 3. Courses in Other Departments:

*(12 hours)*

ART 207 Graphic Design  
ART 235 Photography  
BUAD 361 Principles of Marketing  
MCOM 212 Video Production Industry

#### Recommended Additional Courses:

The following courses are recommended but not required for the minor in Public Relations. These courses provide valuable background for the course work in the minor:

ART 104	Foundational Studies I
BUAD 100	Introduction to Business
CMST 122	Introduction to Public Speaking
ECON 200	Basic Economics ( <i>GEP LAC Group D</i> )

# Recreation and Parks Management

Concentrations:	Community Program Delivery	Adventure Sports	Hospitality & Tourism	Therapeutic Recreation
Hours Required in RECR:	45	42	39	45
Hours Required in Other Departments:	24	15-16	12	30
Additional Hours Required:	0	12	18	0
Total Hours Required:	69	69-70	69	75

## Summary of Requirements for Major in Recreation and Parks Management

### Major

**Concentrations in:**  
**adventure sports**  
**community program**  
**delivery**  
**hospitality management &**  
**tourism**  
**therapeutic recreation**

#### Director:

Robert B. Kauffman,  
Associate Professor,  
Department of HPER

#### Associate Professor:

Kauffman

#### Assistant Professor:

Blankenship

#### Instructors:

Dougherty, Streiby

#### Affiliated Faculty:

Debra Frank, Allegany  
College of Maryland;  
Wilma Brooks, Community  
College of Baltimore County,  
Catonsville Campus;  
Mike Logsdon, Steve Storck,  
Steve Tomb, Garrett  
Community College

- Program accredited by NRPA/AALR (National Recreation and Park Association/American Association for Leisure and Recreation).
- You are required to complete RECR 497 which includes 120 hours of practical experience (not including internships) and to attend one state, regional or national conference during your junior or senior year.
- Current certification in CPR and first aid is required.
- This program may also be completed at the Community College of Baltimore County - Catonsville. Interested students may contact Maureen Dougherty, coordinator of the CCBC Recreation and Parks program, 410/869-1103.

### Major

#### 1. Discipline Core:

(36 hours)

RECR 201 Introduction to Recreation and Parks  
 RECR 221 Introduction to Therapeutic Recreation  
 RECR 342 Park and Facilities Design  
 RECR 380 Recreation Leadership  
 RECR 382 Program Planning  
 RECR 388 Research Methods in Recreation and Parks  
 RECR 440 Organization and Administration of Recreation and Parks  
 RECR 443 Issues and Legal Liability in Recreation and Parks  
 RECR 492 Internship Project  
 RECR 495 Internship in Recreation  
 RECR 497 Out-of-class Requirements (*see bullet at left*)

#### 2. Courses Outside Department

(6 hours)

BUAD 361 Principles of Marketing  
 COSC 220 Introduction to Software Applications  
*or* EDUC 454 Microcomputer Application in Education  
*or* approved computer application course

#### 3. Complete one of the following:

- a. a second major
- b. a minor
- c. an associate degree from a program articulated with FSU's Recreation and Park Mgmt. degree
- d. a concentration within the recreation major as follows:

#### I. Community Program Delivery

(27 hours)

##### A. HPER/RECR (15 hours):

PHEC 408 Movement Experiences for Children  
*or* PHEC 402 Adapted Physical Activities  
 RECR 330 Outdoor Education  
*or* RECR 390 Outdoor Adventures  
 RECR 480 Field Experiences in Recreation and Parks (*minimum 6 hours*)  
*Select one of the following:*  
 PHEC 412 Principles of Coaching  
 PHEC 450 Aquatics and Pool Management  
 RECR 384 Special Events Management  
 RECR 391 Management of Wilderness and Environmental Emergencies  
 RECR 421 Program Design and Evaluation in Therapeutic Recreation

##### B. Psychology (6 hours):

PSYC 150 General Psychology (*GEP LAC Group D*)  
 PSYC 210 Child Development  
*or* PSYC 212 Adolescence and Adulthood

##### C. Sociology (6 hours):

SOCI 100 Intro to Sociology (*GEP LAC Group D*)  
*And one of the following:*  
 SOCI 224 Cultural Anthropology  
 SOCI 305 Racial and Cultural Minorities  
 SOCI 306 Sociology of African Americans  
 SOCI 366 Social Inequality

### Adventure Sports Concentration

- The adventure sports concentration is a collaborative program between Garrett Community College and Frostburg State University.
- You may enroll in this program at Frostburg State University and take adventure sports courses at Garrett Community College, or you may complete your first two years at Garrett Community College and then transfer to FSU.
- Legal residents of Delaware, South Carolina and Virginia may complete a recreation management degree (adventure sports concentration) at Maryland resident tuition rates through the SREB Academic Common Market (see Admissions section of this catalog).

## II. Adventure Sports

(27-28 hours)

### A. Six basic courses - GCC

(6 hours)

*Examples include but are not limited to:*

- \* AVS 111 Beginning Orienteering
- \* AVS 121 Intro. to Rock Climbing
- \* AVS 131 Beginning Skiing
- \* AVS 133 Cross Country Skiing
- \* AVS 135 Cycling
- \* AVS 137 Canoeing I
- \* AVS 138 Backpacking & Outdoor Living Skills
- \* AVS 143 Winter Camping
- \* AVS 148 Kayaking I
- \* AVS 150 Beginning Snowboarding
- \* AVS 165 Raft/River Guiding

### B. Four intermediate courses - GCC

(4 hours)

*Examples include but are not limited to:*

- \* AVS 122 Intermediate Rock Climbing
- \* AVS 132 Intermediate Skiing
- \* AVS 142 Wilderness Survival Skills
- \* AVS 147 Canoeing II
- \* AVS 149 Kayaking II
- \* AVS 151 Intermediate Snowboarding
- \* AVS 175 Professional Raft/River Guide
- \* AVS 183 Intermediate Mountain Biking
- \* AVS 248 Wilderness Search and Rescue
- \* AVS 290 Mountain Biking II

### C. Two advanced courses - GCC

(2 hours)

*Examples include but not limited to:*

- \* AVS 134 Advanced Skiing
- \* AVS 238 Wilderness Leadership
- \* AVS 247 ACA Certified Open Canoe Instructor
- \* AVS 249 ACA Certified Kayak Instructor
- \* AVS 265 Professional Raft/River Guide II
- \* AVS 231 Ski School Instructor Training
- \* AVS 232 Ski Patrol Training
- \* AVS 233 Slalom/GS Ski Racing
- \* AVS 291 Mountain Bike Racing

### D. One of the following:

(3 hours)

- RECR 390 Outdoor Adventures
- or \*AVS 101 Backcountry Living Skills

### E. One of the following:

(3 hours)

- RECR 330 Outdoor Education
- or RECR 392 Backcountry Safety & Rescue
- or \*AVS 260 Advanced Level First Aid and CPR

### F. Three of the following:

(9-10 hours)

- ACCT 100 Financial Accounting
- BUAD 351 Management of Organizations
- BUAD 390 Principles of Finance
- \*BIOL 110 Natural History
- PSYC 150 General Psychology (*GEP LAC Group D*)
- PSYC 210 Child Development
- PSYC 212 Adolescence and Adulthood
- PSYC 385 Group Processes
- PSYC 386 Drugs and Behavior

*\*Garrett Community College courses*

### Hospitality Management & Tourism Concentration

- The hospitality concentration is a collaborative program with Allegany College of Maryland.
- You may enroll in this program at Frostburg State University and take the hospitality courses at Allegany College, or you may complete your first two years at Allegany College and then transfer to FSU.

### Therapeutic Recreation Concentration

- The therapeutic recreation concentration prepares you to sit for the National Council for Therapeutic Recreation Certification Exam.
- Beginning Fall 2001, you may complete the B.S. in Recreation and Parks Management with a therapeutic recreation concentration at the CCBC Catonsville campus.

PSYC 410 Introduction to Counseling  
 PSYC 417 Psychology of Abnormal Behavior  
 RECR 421 Program Design and Evaluation in TR

### III. Hospitality Management and Tourism

(27 hours)

#### A. Recreation course:

(3 hours)

RECR 384 Special Events Management

#### B. Tourism courses:

(3 hours)

GEOG 454 Geography of Tourism

or GEOG 455 Tourism Planning

or \*\*30-120 Principles of Travel/Tourism

#### C. Hotel and Resort courses:

(18 hours)

\*\*30-119 Food Service Sanitation

\*\*30-160 Quantity Food Production

\*\*30-203 Food Purchasing

\*\*30-204 Menu Planning and Food Merchandising

\*\*30-209 Hotel/Motel Front Office Management

\*\*30-215 Hotel/Motel Property Management

\*\*30-216 Food and Beverage Cost Control

#### D. Business courses:

(3 hours)

ACCT 100 Financial Accounting

or ACCT 201 Introductory Accounting I

or \*\*61-109 Practical Accounting/Bookkeeping

*\*\* courses offered at Allegany College*

### IV. Therapeutic Recreation

(33 credits)

#### A. Complete a 480 consecutive hours internship under an NCTRC certified supervisor.

#### B. Recreation Courses:

(9 hours)

RECR 321 Theories and Concepts of Therapeutic Recreation

RECR 421 Program Design and Evaluation in Therapeutic Recreation

RECR 422 Principles and Practices in Therapeutic Recreation

#### C. Biology:

(12 hours)

BIOL 149 General Biology I (*GEP LAC Group C*)

BIOL 201 Anatomy and Physiology I

BIOL 202 Anatomy and Physiology II

#### D. Psychology:

(9 hours)

PSYC 150 General Psychology (*GEP LAC Group D*)

PSYC 210 Child Development

or PSYC 212 Adolescence and Adulthood

PSYC 417 Psychology of Abnormal Behavior

#### E. Other Required Courses:

(3 hours)

*Select one of the following:*

PSYC 250 Death and Dying

PSYC 404 Psychology of Exceptional Children

PSYC 409 Human Learning and Cognition

HEED 200 Nutrition

PHEC 303 Biomechanics for Exercise Science

# Social Science

	For Major	For Teaching Cert. Option
Hours required in Social Sciences:	60-61	63-64
Hours required in other fields:	6	45.5
<b>Total Hours Required:</b>	<b>66-67</b>	<b>108.5-109.5</b>

## Summary of Requirements for Major in Social Science

### Major

Major

### Teaching Certification Option

#### Coordinator:

David J. Fell, Professor,  
Department of Educational  
Professions

#### Department Contacts:

Anthony G. Stair, Chair,  
Dept. of Economics  
Tom Small, Chair, Dept. of  
Geography  
Nicholas Clulee, Chair,  
Dept. of History  
Stephen Simpson, Chair,  
Dept. of Political Science  
Cindy E. Herzog, Chair,  
Dept. of Psychology  
Anthony E. Crosby, Jr.,  
Chair, Dept. of Sociology

- A major in Social Science requires a minimum of 66 hours; you cannot minor in Social Science.
- Completion of the Social Science major (Teaching Certification Option) is required for approved program teacher certification in secondary social studies.
- Only courses in which you earn a grade of C or better will count towards satisfaction of major requirements in the Social Science (Teaching Certification Option).

### 1. Introductory Level Courses:

(36 hours)

#### **Economics** (6 hours)

ECON 201 Principles of Economics (Macro) (GEP LAC Group D)

ECON 202 Principles of Economics (Micro)

#### **Geography** (6 hours)

GEOG 104 Human Geography (GEP LAC Group D)

or GEOG 114 Honors Human Geography (GEP LAC Group D)

GEOG 301 Geography of North America

or GEOG 302 Geography of Maryland

#### **History** (6 hours)+

Select one of the following sequences:

HIST 103, 104 History of the United States

or HIST 113, 114 World History

#### **Political Science** (6 hours)

POSC 110 Introduction to American Politics (GEP LAC Group D)

or POSC 112 Honors Introduction to American Politics (GEP LAC Group D)

POSC 113 Introduction to World Politics (GEP LAC Group D)

or POSC 114 Honors Introduction to World Politics (GEP LAC Group D)

or POSC 131 Introduction to Comparative Politics

#### **Psychology** (6 hours)

PSYC 150 General Psychology (GEP LAC Group D)

or PSYC 151 Honors General Psychology (GEP LAC Group D)

and 1 from among:

PSYC 210 Child Development

PSYC 212 Adolescence and Adulthood

PSYC 220 Psychology of Women

#### **Sociology** (6 hours)

SOCI 100 Introduction to Sociology (GEP LAC Group D)

or SOCI 111 Honors Introduction to Sociology (GEP LAC Group D)

SOCI 200 Social Problems+

### 2. Tracks: (18 hours)

Select 2 of the following departmental patterns.

#### **Economics** (9 hours)

Select from:

ECON 300 History of Economic Thought

ECON 303 American Economic Development

ECON 306 Money and Banking

ECON 307 Government and Business

ECON 308 Urban and Regional Economics

ECON 309 Comparative Economic Systems

ECON 351 Intermediate Macroeconomics

ECON 352 Intermediate Microeconomics

ECON 407 Business Cycles and Forecasting

ECON 490 Special Topics in Economics

#### **Geography** (9 hours)

Select one course from each group:

a. GEOG 300 Economic Geography

or GEOG 407 Political Geography

or GEOG 410 Locational Analysis

b. GEOG 401 Geography of Europe

or GEOG 402 Geography of Russia & the Former Republics

- or GEOG 403 Geography of Sub-Saharan Africa  
 c. GEOG 324 Urban Geography: Internal City Patterns  
 or GEOG 325 Urban Geography: Metropolitan Systems

**History (9 hours)+**

Select from 300- or 400-level history courses.

**Political Science (9 hours)**

Select one course from each of the three groups:

- a. POSC 352 Interest Groups and Public Policy  
 POSC 361 Public Opinion and Political Behavior  
 POSC 362 Political Parties and Elections  
 POSC 363 Media and Politics  
 POSC 365 Women and Politics  
 POSC 456 Urban Policies and Politics  
 POSC 462 Personality and Politics
- b. POSC 330 Politics of Africa  
 POSC 331 Politics of Latin America  
 POSC 332 Politics of Middle East  
 POSC 333 Politics of Western Europe  
 POSC 334 Politics of Eastern Europe  
 POSC 341 International Organization  
 POSC 342 Foreign Policy of the United States  
 POSC 431 Russian Politics
- c. POSC 321 American State and Local Politics  
 POSC 323 Public Administration  
 POSC 324 Criminal Justice Systems in Action  
 POSC 421 American Legislative Politics  
 POSC 422 American Constitutional Law I  
 POSC 423 American Constitutional Law II  
 POSC 427 The American Presidency

**Psychology (9-10 hours)**

Select one course each from three of the four groups:

- a. PSYC 210 Child Development  
 or PSYC 212 Adolescence and Adulthood  
*Selection may not duplicate introductory courses.*
- b. PSYC 213 Psychology of Adjustment  
 or PSYC 301 Research Methods II  
 or PSYC 303 Psychology of Marriage
- c. PSYC 418 Social Psychology
- d. PSYC 414 Theories of Personality  
 or PSYC 417 Psychology of Abnormal Behavior

**Sociology (9 hours) +**

SOCI 305 Racial and Cultural Minorities  
 or SOCI 224 Cultural Anthropology  
 and select two additional courses, one each from two of the following groups. Selections may not duplicate choices made to meet other major requirements.

**a. Social Institutions and Structures**

SOCI 305 Racial and Cultural Minorities  
 SOCI 362 Sociology of Religion  
 SOCI 364 Marriage and Family Relationships  
 SOCI 366 Social Inequality  
 SOCI 367 Sociology of Medicine  
 SOCI 436 Social Aspects of Mass Communication

**b. Social Behavior**

SOCI 203 Sociology of Deviant Behavior  
 SOCI 306 Sociology of African Americans  
 SOCI 332 Collective Behavior  
 SOCI 334 Gender and Social Life  
 SOCI 340 Criminology  
 SOCI 442 Juvenile Delinquency  
 SOCI 468 Sociology of Later Life

**c. Community and Society**

SOCI 224 Cultural Anthropology  
 SOCI 322 Social Demography  
 SOCI 325 Community Analysis  
 SOCI 326 Sociology of Rural Life  
 SOCI 328 Sociology of Urban Life

**3. Research Methods+**

(3-4 hours)

Choose one of the following from a department selected as a track above:  
 ECON 450 Quantitative Economics  
 GEOG 380 Geographic Research Methods and Field Techniques  
 HIST 299 Writing and Research in History  
 POSC 311 Research Methods  
 PSYC 300 Research Methods I  
 SOCI 311 Basic Research Methods

**4. Social Science Seminar (3 hours)**

SOSC 490 Topics in Social Science

**5. Other required courses (6 hours)**

CMST 102 Introduction to Human Communication\*  
 COSC 100 Introduction to Computer Science\*+

*\*Note: you must receive a grade of C or better for this course to count toward major.*

- The discipline and/or education requirements for teaching certification may change as a result of NCATE program review requirements, or state or federal action. If you are interested in the Teaching Certification Option, you should stay in close contact with the department chair or coordinator and with the Educational Professions Department. It is to your advantage to complete an NCATE-approved program.

### Summary of Requirements for Major in Social Science – Teaching Certification Option+

If you want to earn teaching certification in social studies, you must complete the Social Science major described above with the **following variations** in requirements (footnoted with a + in the major description):

#### 1. Introductory Level Courses:

*(42 hours)*

*As above, except:*

##### **History** (12 hours)

*Both of the following sequences:*

HIST 103, 104 History of the United States

HIST 113, 114 World History

##### **Sociology** (6 hours)

SOCI 100 Introduction to Sociology (*GEP LAC Group D*)

or SOCI 111 Honors Intro. to Sociology (*GEP LAC Group D*)

*and one from among:*

SOCI 305 Racial and Cultural Minorities

SOCI 224 Cultural Anthropology

SOCI 306 Sociology of African Americans

#### 2. Tracks and 3. Research Methods: (18-19 hours)

*Select 2 of the departmental patterns. Include a research methods course as a substitute for any one course in one selected track. See the list of research methods courses in 3. Research Methods in the description of the major above.*

##### **History** (9 hours)

*Three 300- or 400-level history courses. At least one of the courses must be non-western (e.g., Asian, African, Middle Eastern).*

##### **Sociology** (9 hours)

*Select three courses, one each from groups a., b., and c. listed above. Selections may not duplicate courses selected to meet other major requirements.*

#### 3. Other required courses:

COSC 100 Introduction to Computer Science *or*

EDUC 346, 447, 448 Education Technology Labs I-III

### Summary of Requirements for Teaching Certification Option in Social Studies

If you wish to complete a Maryland State approved program in teaching Social Studies, you must:

- Complete the BA/BS in Social Science - Teaching Certification Option.
- Meet the phase admissions requirements summarized in the Educational Professions section.
- Complete the professional education sequence described in Education: Secondary School Programs.

# Social Work

## Major

### Professor:

Connelly, B. Wright (Chair)

### Associate Professor:

Powell

### Assistant Professor:

Russell

- Since the Social Work curriculum is highly sequential in design, students who begin their course of study after the first semester of their sophomore year will often need more than four years to complete the program
- Only courses in which a grade of C or better is earned will count toward satisfaction of major requirements.
- Academic credit is not given for life or work experiences.
- The Social Work program has a competitive admissions process. Department faculty reserve the right to select those candidates who demonstrate the greatest potential for developing as professional social workers.

	For Major
Hours Required in Social Work	42-45
Hours Required in Other Departments	19-22
<b>Total Hours</b>	<b>64</b>

The major in Social Work is designed to prepare you for generalist practice. It is built upon a liberal arts foundation and provides you with the knowledge, values, and skills needed to help individuals, families, groups, organizations and communities.

Content in the major forms the foundation for professional practice. The curriculum covers values and ethics, diversity, social and economic justice, populations-at-risk, human behavior and the social environment, social welfare policy and services, social work practice, research and field practicum. All students are required to complete a full-time internship which constitutes the last semester of the senior year.

Graduates with a major in Social Work may begin professional practice in a variety of fields including mental health, aging, family and children's services, health care, addictions, juvenile and adult corrections, developmental disabilities, and community planning and development.

The Social Work program is accredited by the Council on Social Work Education (CSWE). Graduates of the program are eligible to apply to take state social work licensure exams at the baccalaureate level and to compete for employment positions where such a license is required. In addition, qualified graduates may also apply for advanced standing in graduate schools of social work which allows for completion of a Master's degree in less time than it would otherwise take. Contact the Department Chair for further information.

## Requirements for Admission to the Social Work Program

Applicants must meet the following admissions requirements in order to be accepted into and complete the Social Work program.

Enrollment in the program is controlled by the number of slots available in the program at the time of admission. Admissions decisions are based on a competitive process. Application deadlines for all students, including transfer students, are established each semester by the program and publicly announced by the department.

### Admission Requirements

1. Completion of at least 30 credit hours
2. Cumulative GPA of at least 2.3 (or recommendation of faculty member)
3. Completion of a declaration of major form
4. Completion of an application to the Social Work program which includes a self statement and three letters of reference (Application packets are available from the department.)
5. Completion of SOWK 370 with a grade of C or better.
6. Approval of the Social Work Department Admissions Committee (which may require a personal interview with the Social Work faculty). The Admissions Committee may award special provisional admission.

### Graduation Requirements

1. Completion of SOWK 492 with a grade of C or better and SOWK 495 with a grade of P
2. Cumulative GPA of at least 2.5 both overall and in courses required for the major
3. Meet program performance standards set by the department as measured by a standardized exit exam. Students who do not successfully meet these standards will be given additional opportunities to repeat the exam but only at their own expense.
4. Completion of an exit interview with the Social Work faculty

### Dismissal Policy

The following constitute grounds for dismissal from the Social Work program:

1. Inability to meet the academic requirements of the program
2. Failure to address and correct deficiencies in competencies cited at last assessment review
3. Violations of the National Association of Social Workers' Code of Ethics (Copies of the Code are available from the Department of Social Work.)
4. Violations of FSU's Student Code of Conduct as outlined in the *Pathfinder* which would result in a referral to the University's Judicial System.

A grievance procedure for protecting students' rights to due process is outlined in the Social Work Student Handbook available from the Department of Social Work.

## Summary of Requirements for Major in Social Work

Major

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### 1. Social Work Courses:

*(42 hours)*

SOWK 310 Statistics for Social Science  
SOWK 311 Basic Research Methods  
SOWK 370 Introduction to Social Welfare and Social Work  
SOWK 371 Social Policy  
SOWK 375 Human Behavior and the Social Environment I  
SOWK 377 Human Behavior and the Social Environment II  
SOWK 379 Foundations for Social Work Practice  
SOWK 470 Generalist Practice I  
SOWK 471 Generalist Practice II  
SOWK 492 Social Work Seminar  
SOWK 495 Internship in Social Work

### 2. Courses in Other Departments:

*(19 hours)*

SOCI 100 or 111 Introduction to Sociology (*GEP LAC Group D*)  
SOCI 200 Social Problems  
COSC 100 Introduction to Computer Science  
PSYC 150 or 151 General Psychology (*GEP LAC Group D*)  
POSC 110 or 112 Introduction to American Politics (*GEP LAC Group D*)  
BIOL 109 Human Biology and the Environment (*GEP LAC Group C*)

### 3. Diversity Requirement:

*(3 hours)*

*Select one of the following courses:*

SOWK 305 Racial and Cultural Minorities  
SOWK 306 Sociology of African Americans  
SOCI 334 Gender and Social Life  
SOCI 366 Social Inequality  
SOWK 468 Sociology of Later Life

*or*

Complete a minor in African American Studies, Women's Studies or Foreign Languages (either French or Spanish)

# Sociology

## Major

## Minor

### Tracks in:

**general sociology**  
**applied social research**

### Option in data analysis

#### Professor:

Connelly

#### Associate Professors:

Cornwell, Crosby (Chair),  
Olson

#### Assistant Professors:

Moore, Russell, Selby

- Sociology majors may choose either the General Sociology Track or the Applied Social Research Track.
- Sociology majors may elect an option in Data Analysis
- For departmental courses above the 100 level in the Sociology major, only courses in which a grade of C or better is earned will count toward satisfaction of major requirements.
- The Sociology major may be completed on the Frostburg campus or at the Center in Hagerstown.

*\*A seminar course (491) may be applicable to the Distribution Requirements with the prior approval of the department; only 1 seminar may be used in this manner.*

	For Major		For Minor
	General Track	Applied Social Research	
Hours Required in Sociology:	33	36	18
Hours Required in Other Departments:	3	6	0
<b>Total Hours Required:</b>	<b>36</b>	<b>42</b>	<b>18</b>

## Summary of Requirements for Major/Minor in Sociology

Major	Minor
<p><b>1. Basic Courses:</b> (6 hours) SOC 100 Intro. to Sociology (GEP LAC Group D) or SOC 111 Honors: Intro. to Sociology (GEP LAC Group D) SOC 200 Social Problems</p>	<p>(6 hours) SOC 100 Intro. to Sociology (GEP LAC Group D) or SOC 111 Honors: Intro. to Sociology (GEP LAC Group D) SOC 200 Social Problems or SOC 203 Soc. of Deviant Behavior</p>
<p><b>2. Methods and Theory:</b> (12 hours) SOC 310 Statistics for Social Science SOC 311 Basic Research Methods SOC 450 Classical Sociological Theory SOC 451 Contemporary Sociological Theory</p>	
<p><b>3. Distribution within Department:</b> <i>Choose one of the following tracks:</i></p> <p><b>General Sociology Track</b> (15 hours) <i>3 courses in one of the following subfields; 1 course in each of the others:*</i></p> <p><b>Subfield I: Social Institutions and Structures</b> SOC 305 Racial and Cultural Minorities SOC 362 Sociology of Religion SOC 364 Marriage and Family Relationships SOC 366 Social Inequality SOC 367 Sociology of Medicine SOC 436 Sociological Aspects of Mass Communication</p> <p><b>Subfield II: Social Behavior</b> SOC 203 Sociology of Deviant Behavior SOC 306 The Sociology of African Americans SOC 332 Collective Behavior SOC 334 Gender and Social Life SOC 340 Criminology SOC 442 Juvenile Delinquency SOC 443 The American Correctional System SOC 468 Sociology of Later Life</p> <p><b>Subfield III: Community and Society</b> SOC 224 Cultural Anthropology SOC 322 Social Demography SOC 325 Community Analysis SOC 326 Sociology of Rural Life SOC 328 Sociology of Urban Life</p>	<p><b>Applied Social Research Track</b> (9 hours) <i>One course in each subfield:*</i></p> <p><b>Minor</b> (12 hours) <i>2 courses in one subfield; 1 course in each of the others:*</i></p>
<p><b>4. Internship Requirement</b> (optional)</p>	<p>(9-15 hours) SOC 492 Internship Seminar SOC 495 Internship</p>
<p><b>5. Required Courses in Other Departments:</b> (3 hours)</p>	<p>(6 hours) SOC 100 Intro. to Computer Sci. SOC 220 Intro to Software Appl.</p>

# Theatre

## Major

## Minor

### Tracks in: acting directing production/design

#### Professor:

McCulloch

#### Associate Professor:

Kagey (Chair),

#### Assistant Professor:

Yost-Rushton

- You must have a 2.7 cumulative GPA in all theatre courses to meet graduation requirements.

- Legal residents of Delaware may complete a theatre degree (acting or directing track) at Maryland resident tuition rates through the SREB Academic Common Market (see Admissions section of this catalog).

## Summary of Requirements for Option in Data Analysis

### 1. Required Courses in Sociology:

(9 hours)

SOCI 312 Applied Social Research

SOCI 325 Community Analysis

SOCI 499 Individual Problems in Sociology

### 2. Required Courses in Other Departments:

(9 hours)

COSC 100 Introduction to Computer Science

ENGL 338 Technical Writing (*GEP BR Adv. Comp.*)

MATH 209 Elements of Applied Probability and Statistics (*GEP BR Math*)

	For major	For minor
Hours Required in Theatre	45	21
Hours Required in Other Disciplines:	6	3
Total Hours Required:	51	24

## Summary of Requirements for Major/Minor In Theatre

### Major Concentration

### Minor

### 1. Core Courses in Theatre:

(33 hours)

THEA 104 Theatre (3 hours; one hour must be in a production area)

THEA 106 Introduction to Theatre

(*GEP LAC Group A*)

THEA 107 Introduction to Theatrical Vision

(*GEP LAC Group A*)

THEA 110 Basic Acting

THEA 206 Modern American Drama

(*also offered as ENGL 206*)

THEA 308 Directing

THEA 425 History of Theatre I

THEA 426 History of Theatre II

THEA 427 History of Theatre III

THEA 431 World Drama I (*also offered as ENGL 431*)

THEA 432 World Drama II (*also offered as ENGL 432*)

(12 hours)

THEA 106 Introduction to Theatre  
(*GEP LAC Group A*)

THEA 107 Intro. to Theatrical Vision

(*GEP LAC Group A*)

THEA 110 Basic Acting

THEA 308 Directing

### 2. Theatre Tracks:

(12 hours)

You must complete 12 hours in one of the following tracks:

#### a. Acting

THEA 208 Acting: Stanislavskian Approaches

THEA 318 Acting: Analysis and Performance

THEA 319 Acting in Pre-Modern Drama

THEA 420 Marketing Yourself as an Actor

#### b. Directing

THEA 309 Experiences in Scripting and Staging

THEA 325 Advanced Directing

THEA 466 Projects in Directing

*and select one from:*

THEA 204 Stagecraft  
 THEA 305 Scene Design  
 THEA 306 Stage Lighting  
 THEA 307 Costume Design

*Or, with department permission, a second THEA 466 Projects in Directing.*

**c. Production/Design**

*Choose two of the following:*

THEA 305 Scene Design  
 THEA 306 Stage Lighting  
 THEA 307 Costume Design  
 THEA 465 Projects in Theatrical Design

*Choose one of the following (must have departmental permission):*

THEA 400 Theatre Production  
 THEA 493 Field Work in Theatre Practice  
 THEA 499 Directed Study (*production/design focus*)

**d. General Theatre**

Nine hours of electives in Theatre; six must be at 300-level or higher.

*Plus one of the following:*

ENGL 290 Topics in Language and Literature  
 ENGL 340 Shakespeare

**3. Additional Theatre Electives:**

*(0 hours)*

*(9 hours)*

*You must select additional courses, for a total of 9 hours, from any Theatre courses not already used to fulfill a Theatre minor requirement.*

**4. Required Courses in Other Disciplines:\***

*(6 hours)*

CMST 102 Intro. to Human Communication  
 COSC 100 Introduction to Computer Science

*(3 hours)*

CMST 102 Intro. to Human Communication

# Wildlife & Fisheries

## Major

### Coordinator:

Ronald Barry, Professor,  
Department of Biology

### Professors:

Barry, Harman, Morton  
(Chair), Riley, Yoder

### Associate Professors:

G. Brewer, Raesly, Seddon

### Assistant Professors:

Bernardo, Bowe, Fritz,  
Kutay, Li, Pegg, Serfass,  
Shumway

- The Department of Biology offers this program.
- A Wildlife/Fisheries major must complete courses listed from Sections 1 and 2, and choose courses from either Section 3 or Section 4 (or both).
- There is no minor in Wildlife/Fisheries.
- Students completing the program as listed meet all educational requirements for their certification by The Wildlife Society or American Fisheries Society (depending upon the option chosen) and will meet educational requirements for scientific-research positions in Wildlife Biology or Fisheries Biology for federal agencies.
- Students intending to further their education in graduate school are also encouraged to take one semester of Organic Chemistry.
- Legal residents of Virginia may complete a wildlife and fisheries degree at Maryland resident tuition rates through the SREB Academic Common Market (see Admissions section of this catalog).

For Major

Hours Required in Wildlife/Fisheries:	50-60
Hours Required in Other Departments:	30
Total Hours Required:	80-90

## Summary of Requirements for Major in Wildlife & Fisheries

Major

### 1. Common Courses in Biology:

(33 hours)

BIOL 149 General Biology I (*GEP LAC Group C*)  
 BIOL 150 General Biology II  
 BIOL 200 Scientific Investigation and Communication  
 BIOL 302 Animal Physiology  
 BIOL 327 Comparative Anatomy  
 BIOL 340 General Ecology  
 BIOL 350 Genetics  
 BIOL 414 Quantitative Analysis of Vertebrate Populations  
 BIOL 425 Forest Science

### 2. Required Courses in Other Departments:

(30 hours)

CHEM 101, 102 General Chemistry I and II (*101-GEP LAC Group C*)  
 CMST 102 Introduction to Human Communication  
 ENGL 338 Technical Writing (*GEP BR Adv. Comp*)  
 or ENGL 339 Scientific Writing  
 GEOG 103 Physical Geography (*GEP LAC Group C*)  
 GEOG 472 Environmental Planning  
 GEOG 473 Environmental Law  
 MATH 209 Elements of Applied Probability and Statistics (*GEP BR Math*)  
 MATH 220 Calculus for Applications I  
 or MATH 226 Calculus I (*GEP BR Math*)

### 3. Additional Courses for Wildlife Option:

(26-27 hours)

BIOL 230 Wildlife Techniques  
 BIOL 303 Plant Physiology  
 BIOL 305 Dendrology  
 BIOL 314 Plant Taxonomy  
 BIOL 421 Sample Design and Analysis of Plant Communities  
 BIOL 450 Ecology & Management of Wildlife Populations  
 plus two courses from:  
 BIOL 406 Ornithology  
 BIOL 422 Herpetology  
 BIOL 423 Mammalogy

### 4. Additional courses for Fisheries Option:

(17 hours)

BIOL 417 Ichthyology  
 BIOL 420 Fish Management and Culture  
 BIOL 430 Introductory Limnology  
 CHEM 420 Environmental and Chemical Analysis  
 GEOG 432 Hydrology

# Women's Studies

## Minor

### Coordinator:

Sally A. Boniece, Associate Professor, Department of History

### Participating Faculty:

#### Professors:

McCulloch (Theatre),  
McGovern (History),  
Santoro (Psychology)

#### Associate Professors:

Boniece (History), Coward (English), Kroeger-Mappes (Philosophy), O'Rorke (Political Science), Rhodes (Visual Arts)

#### Assistant Professors:

Johansen (History), Rossi (Economics)

- Women's Studies is a multicultural and multidisciplinary minor.
- You cannot major in Women's Studies.

# Writing

## Minor

### Coordinators:

Judy Pula, Associate Professor, Department of English  
Zita McShane, Associate Professor, Department of English

- The writing minor may be combined with any major except the Creative Writing and Professional Writing concentrations in the English major.
- You cannot major in writing.

For Minor

Total Hours Required:

18

## Summary of Requirements for Minor in Women's Studies

Minor

### 1. Required Courses:

*(6 hours)*

WMST 201 Introduction to Women's Studies  
WMST 491 Seminar in Women's Studies

### 2. Elective Courses:

*(12 hours)**Select from among:*

ART 370 Women/Gender and the Visual Arts  
THEA 428 Women Through Theatre  
ECON 313 The Economics of Race and Gender  
ENGL 290 Topics in Language & Literature *(when content is appropriate)*  
ENGL 450 Women and Literature  
HIST 305 Women and Society in Modern Europe  
HIST 415 History of American Women  
HIST 431 History of the American Family  
MUSC 250 Women in Music  
PHIL 409 Philosophy and Women  
POSC 365 Women and Politics  
PSYC 220 Psychology of Women  
PSYC 270 Psychological Perspectives of Human Sexuality  
SOC 334 Gender and Social Life  
SOC 466 Women, Health, and Healing  
WMST 301 Latin American Women's Issues  
WMST 486 Women, Science and Society  
WMST 494 Practicum in Women's Studies *(a maximum of 3 credits may be applied to the minor)*  
WMST 499 Independent Study

For Minor

Hours Required in English:

21

Hours Required in Other Departments:

0

Total Hours Required:

21

## Summary of Requirements for Minor in Writing

Minor

### 1. Core Curriculum:

*(9 hours)*

ENGL 336 Journalistic Writing  
ENGL 430 The Composing Processes *(senior year only)*  
ENGL 498 Field Experience in Writing *(junior or senior year)*  
*or* Internship in English (ENGL 492 *and* ENGL 495)

### 2. Distribution:

*(6 hours)**Select one course from each group:*

- ENGL 330 Business Writing  
*or* ENGL 338 Technical Writing
- ENGL 334 Creative Writing: Fiction I  
*or* ENGL 335 Creative Writing: Poetry

### 3. Electives:

*(6 hours)*

*Students will choose 6 hours of upper level English writing courses.*