Urban and Regional Planning

Major

	MAJOR
Hours Required in Geography:	32-44
Hours Required in Other Departments:	27-39
Total Hours	**71**

Coordinator:
Henry Bullamore, AICP, Professor, Department of Geography

Participating Faculty:

Professors:
Caupp (Geography), Dalton (Economics), Hartlaub (Political Science), Kauffman (Recreation & Parks Management), Moore (Sociology) Neral (Economics), O'Rorke (Political Science), Precht (Geography), Saku (Geography), Stair (Economics)

Associate Professors:
Kessler (Geography), McMullen (Sociology), Powell (Social Work)

Assistant Professor:
Russo (Geography)

- This is an interdisciplinary program.
- See the Department of Geography for advising.
- You may not minor in Urban and Regional Planning.
- Frostburg State University is a member of the Association of Collegiate Schools of Planning.
- Completion of the major requirements leads to the professional degree of Bachelor of Science in Urban and Regional Planning. In addition to the requirements listed, degree candidates must meet all requirements listed in the current FSU Undergraduate Catalog for the Bachelor of Science.

Summary of Requirements for Major in Urban and Regional Planning

Major

1. Introductory Level Courses: *(25 hours)*

CMST 102 Introduction to Human Communication
or CMST 122 Introduction to Public Speaking
ECON 202 Principles of Economics (Micro)
GEOG 103 Physical Geography *(GEP Group C)*
GEOG 104 Human Geography *(GEP Group D or F)*
GEOG 275 Fundamentals of Geographic Data Handling *(Tech. Fluency)*
MATH 209 Elements of Applied Probability and Statistics *(Core Skill 3)*
POSC 110 Introduction to American Politics *(GEP Group D)*
SOCI 100 Introduction to Sociology *(GEP Group D)*

2. Professional Core Courses: *(34 hours)*

ECON 404 Public Sector Economics
ENGL 338 Technical Writing
or ENGL 308 Social Sciences Advanced Composition
or ENGL 310 General Advanced Composition *(Core Skill 2)*
GEOG 310 Fundamentals of Cartography
GEOG 317 Principles of Geographic Information Science
GEOG 324 Urban Geography: Internal City Patterns
GEOG 325 Urban Geography: Metropolitan Systems
GEOG 380, SOCI 311 or POSC 250 Research Methods
GEOG 421 Regional Planning
GEOG 450 Urban Planning
GEOG 485 Senior Project *(Capstone)*
POSC 323 Public Administration
SOCI 328 Sociology of Urban Life

3. Electives:*

(6 hours from courses listed below or courses for another focus in 4.)

ECON 408 Urban and Regional Economics
ECON 410 Resource and Energy Economics
ENES 100 Introduction to Engineering Design
GEOG 360 Food Systems
GEOG 406 Management and Conservation of Natural Resources
GEOG 410 Locational Analysis
GEOG 423 Geography of the Suburbs
GEOG 425 Geography of Transportation
GEOG 471 Engineering for Land Development
POSC 358 American Public Policy
POSC 456 Urban Politics and Policies
RECR 201 Introduction to Recreation and Parks
RECR 342 Park and Facility Design
RECR 443 Current Issues & Legal Liability in Recreation and Parks
SOCI 200 Social Problems
SOCI 305 Racial and Cultural Minorities *(GEP Group F)*
SOCI 322 Demography
SOWK 371 Social Policy

4. Advanced Planning Focus:*

(6 hours, select one focus)

Community Planning

SOCI 326 Sociology of Rural Life
or SOWK 370 Introduction to Social Welfare and Social Work
SOCI 325 Community Analysis

Tourism Development

GEOG 454 Geography of Tourism
GEOG 455 Tourism Planning

Mapping Science

Select two from:

GEOG 413 Remote Sensing—Image Interpretation
GEOG 414 Digital Image Processing and Analysis
GEOG 415 Applied Design in the Mapping Sciences
GEOG 417 Geospatial Analysis

Environmental Planning

GEOG 472 Environmental Planning
GEOG 473 Environmental Law *or* GEOG 460 Natural Hazards in the Physical Environment

* *Completion of Introductory Level and Professional Core courses will fulfill prerequisites for most of these courses. Additional prerequisites may apply for POSC 456, SOWK 371, and GEOG 471.*

Wildlife & Fisheries

Major

See related programs:

- BIOLOGY
  - -PRE-HEALTH OPTION
  - -BIOTECHNOLOGY
  - -ENVIRONMENTAL SCIENCE
- ENVIRONMENTAL ANALYSIS & PLANNING
- ETHNOBOTANY
- FORESTRY
- INTERPRETIVE BIOLOGY & NATURAL HISTORY

Contact:
Sunshine Brosi, Assistant Professor, Department of Biology

Professors:
Raesly (Chair), Seddon, Serfass

Associate Professors:
Ammer, Fritz, Li, Pegg

Assistant Professors:
Brosi, Fiscus, Keller, Lambert, Puthoff, Robertson-Thompson

- Students completing the professional programs as listed meet all educational requirements for their certification by The Wildlife Society or American Fisheries Society (depending upon the option chosen).
- Students can choose to add a fisheries option to either wildlife option.
- Students will meet educational requirements for scientific research positions in Wildlife Biology or Fisheries Biology for federal and state agencies.
- Students intending to further their education in graduate school are also encouraged to take one semester of organic chemistry.
- Minors are available in biology, forestry, ethnobotany, geography, and sustainability studies.

	WILDLIFE PROFESSIONAL	WILDLIFE GENERAL	PROFESSIONAL FISHERIES
Hours Required in Biology:	45-48	45-50	29
Hours Required in Other Departments:	30-32	20-23	29
Total Hours Required:	**75-77**	**68-70**	**58**

Summary of Requirements for Major in Wildlife & Fisheries

Major

1. Core Curriculum: *(36 hours)*

BIOL 149 General Biology I *(GEP Group C)*
BIOL 150 General Biology II
BIOL 200 Scientific Investigation and Communication
BIOL 340 General Ecology
BIOL 350 Genetics
BIOL 492 Wildlife-Fisheries Seminar *(Capstone)*
CHEM 201 General Chemistry I *(GEP Group C)*
CMST 102/112 Introduction to Human Communication
ENGL 339 Scientific Writing *(Core Skill 2)*
or ENGL 338 Technical Writing *(Core Skill 2)*
GEOG 103/113 Physical Geography *(GEP Group C)*
MATH 209/219 Elements of Applied Probability and Statistics *(Core Skill 3)*

2. Wildlife Core Requirements: *(23-24 hours)*

Wildlife Management:
BIOL 450 Ecology and Management of Wildlife Populations

Wildlife Techniques:
BIOL 230 Wildlife Techniques

Wildlife Biology, take two of the following:
BIOL 406 Ornithology
BIOL 422 Herpetology
BIOL 423 Mammalogy

Anatomy and Physiology, take one of the following:
BIOL 302 Animal Physiology
BIOL 427 Comparative Anatomy

Botany, take one of the following:
BIOL 305 Dendrology
BIOL 314 Plant Taxonomy

Policy, Administration, and Law, take one of the following:
BIOL 425 Forest Ecology and Conservation
GEOG 472 Environmental Planning
GEOG 473 Environmental Law

3. Requirements for Professional Wildlife Track:

1. Core Curriculum: *(36 hours – listed above)*
2. Wildlife Core Requirements: *(23-24 hours – listed above)*
3. Professional Certification Core Requirements *(16-17 hours)*

Quantitative Sciences:
BIOL 414 Quantitative Analysis of Vertebrate Populations
MATH 220 Calculus for Applications I
or MATH 236 Calculus I *(Core Skill 3)*
CHEM 202 General Chemistry II

Botany, one additional course from:
BIOL 303 Plant Physiology
BIOL 305 Dendrology
BIOL 314 Plant Taxonomy
BIOL 312 Morphology of Vascular Plants

Policy, Administration, and Law, one additional course from:
BIOL 425 Forest Ecology and Conservation
GEOG 472 Environmental Planning
GEOG 473 Environmental Law

4. Requirements for General Wildlife Track

1. Core Curriculum: *(36 hours – listed above)*
2. Wildlife Core Requirements: *(23-24 hours – listed above)*
3. General Wildlife Track Requirements *(9-11 hours)*

MATH 102 College Algebra (Core Skill 3)
or MATH 120 Pre-Calculus (Core Skill 3)
or any math course above 219

Plus two additional courses from:
BIOL 302 Animal Physiology
BIOL 309 General Entomology
BIOL 334 General Animal Behavior
BIOL 406 Ornithology
BIOL 411 Invertebrate Zoology
BIOL 412 General Parasitology
BIOL 417 Ichthyology
BIOL 422 Herpetology
BIOL 423 Mammalogy
BIOL 426 Vertebrate Zoology
BIOL 427 Comparative Anatomy

5. Requirements for Professional Fisheries Track

1. Core Curriculum: *(36 hours – listed above)*
2. Professional Fisheries Track Requirements: *(22 hours)*

CHEM 202 General Chemistry II
BIOL 417 Ichthyology
BIOL 420 Fish Management and Culture
BIOL 430 Introductory Limnology
CHEM 420 Environmental Chemical Analysis
GEOG 430 Surface Water Hydrology