

Biological Science Degree Programs

The two programs offered in the biological sciences represent a joint effort between two constituent institutions of the University of System of Maryland: FSU and the University of Maryland Center for Environmental Science's Appalachian Laboratory (AL). Each program is distinct, yet they have similar structure and basic degree requirements and involve many of the same faculty and resources. Accordingly, the two degree programs adhere to a common set of regulations and requirements, which are listed below.

Criteria and Procedure for Regular Admission

Basic admission procedures and requirements are in the "Graduate Study at FSU" section of this catalog. The following are additional requirements and procedures for the two programs in the biological sciences:

1. You must have completed a baccalaureate degree from an accredited college or university with an undergraduate grade point average of at least 3.0 on a 4.0 scale. Official scores on the Graduate Record Examination (General Test) must be submitted by the Educational Testing Service directly to the Office of Graduate Services. If you have not earned at least a 3.0 GPA, you must submit a minimum score 300 (V+Q) on the General Test of the Graduate Record Examination which must have been taken within five years of the application deadline. Scores below the above criteria will be considered individually.
2. You must submit a resume, summary of educational goals and research interests, and three professional references. References will be identified by students as part of the electronic application process. Students applying by paper will be required to use forms supplied by the Office of Graduate Services as part of your application for graduate study.
3. All application materials must be received by March 1 for the fall semester and November 1 for the spring semester. A screening committee composed of Biology faculty will determine if your undergraduate background satisfies admission criteria for the individual programs (see the following pages). Some students may be required to take undergraduate courses to meet deficiencies. These courses are not counted toward the 36 credit hours for degree requirements.
4. Before you can be admitted to either of the MS programs in the biological sciences, you must have secured a major professor from the graduate faculty of Biology or AL. Applicants should initiate correspondence with faculty members in Biology or AL prior to the formal process of completing an application. Early contact with the faculty is very important. A list of current faculty members and their research interests and areas of expertise is available from the graduate program coordinator

A change in major professors is permissible.

Transfer/Proficiency Credit

1. If you have successfully completed (grade of B or better) graduate courses at another accredited institution, you may apply for transfer credit for up to nine credits in one of these programs. If, upon faculty assessment, the courses are deemed essentially comparable to courses in one of these programs, you will be awarded credit toward completion of your degree. All courses considered for transfer credit

must meet the graduate transfer credit policy requirements, including the six-year limit.

2. Proficiency credit/credit by exam are not options in these two programs.

Procedural Sequence and Requirements for Degree Candidates

You must complete steps 1-5 (below) during your first year. Step 7 (write and defend thesis) represents the final major requirement of the degree. There is a deadline following initiation of the program of April 15 for students entering in fall, and Nov. 15 for students entering in spring for the Master's Committee selection, for oral examinations, plan of study and submission of the thesis proposal. Notifications and submissions are to be made to the graduate program coordinator and Office of Graduate Services. If you are unable to meet the deadlines, an appeal with a revised timeline from your major professor must be submitted to the graduate program coordinator for review and approval by the Graduate Committee.

1. Select Master's Committee

With assistance of your major professor, you must select a Master's Committee. The Master's Committee must consist of your major professor plus at least two other members, one of whom must be a faculty member of FSU. Individuals from other institutions or agencies may serve on the committee, but they must be accepted as adjunct faculty Biology department or AL.

2. Take Oral Qualifying Examination

Your Master's Committee will give you an oral qualifying exam. This will test your general knowledge of the biological sciences, natural resource conservation, and your proposed area of specialization. This exam is primarily a diagnostic test to help your committee develop a program of study that will strengthen your understanding of the concepts in areas where you have shown weakness. In the event of substandard performance in all areas, a retest must be taken within 6 months of the first exam. Failure of the second examination or failure to retake the exam within 6 months will result in your termination from the MS program.

3. Develop Plan of Study

After successful completion of the oral qualifying exam, you and your committee will develop a plan of study that is a list of the courses you will take. The plan of study must be approved unanimously and signed by the members of your Master's Committee.

Your plan of study will address four areas:

- a. Undergraduate deficiencies, as determined by the Screening Committee (see special admission criteria in the appropriate field)
- b. Core courses (see program description in the appropriate field) and any substitutions of core courses
- c. Elective courses
- d. Any additional requirements identified by your Master's Committee

Subsequent changes to the plan of study must be submitted to the graduate program coordinator with the appropriate Graduate Committee authorization. A single course change in an elective course requires only the approval of your major professor, but any subsequent changes require approval by a majority of your Master's Committee.

The following special requirements apply to the selection of courses:

- a. At least 15 credit hours must be at the 600 level or above.
- b. BIOL 600 (Methods of Research in Biological Sciences) and, for Wildlife/Fisheries Biology, MATH 680 (Research Statistics) or a suitable statistics course should be taken during the first year of your program

- c. No more than 6 credits of Special Topics (BIOL 650) and 3 credits of Individual Research (BIOL 699) may be counted as elective courses. Thesis (BIOL 710) credits may not be counted as elective course credits.
- d. No more than 12 credits of Thesis (BIOL 710) may be counted toward the degree.

4. Submit Plan of Study

The approved Plan of Study form will be forwarded by your major professor to the graduate program coordinator.

5. Submit an Approved Thesis Proposal

A copy of your written thesis proposal (see Graduate Student Handbook for details) must be signed by all members of your Master's Committee and forwarded to the graduate program coordinator. The thesis proposal must be distributed to your Master's Committee at least 1 week prior to the meeting where that committee will consider approval of your proposal.

6. Apply for Degree Candidacy

See below for details.

7. Write and Defend Thesis

Complete an original thesis, give an oral presentation of the thesis and then defend the thesis in a final oral thesis defense. See below for details.

8. Continuous Registration

Register for at least 1 credit hour of BIOL 710 during the intended semester of graduation. If degree requirements are not completed during the semester of initial application for graduation, the student must continue to register each semester until graduation occurs. A student seeking August graduation must register in the first summer session. A student failing to register for a semester will automatically be dropped from the program, and to graduate must reapply for admission. Students who are readmitted will register for an appropriate number of semester credits as determined by departmental policy and implemented by the graduate program coordinator.

Degree Candidacy

FSU regards degree candidacy as an important element of the master's degree programs in the biological sciences. The purpose of degree candidacy is to provide a formal mechanism whereby your academic performance and progress are evaluated. Forms for application to degree candidacy are available through your graduate program coordinator.

To be admitted to degree candidacy, you must have:

1. Completed steps 1-5 above
2. Completed any deficiency courses identified by the Screening Committee
3. Completed 12 hours of graduate course work (maintaining at least a 3.0 GPA)

Thesis

A major part of the degree programs in the biological sciences is the research associated with your project. The thesis is reflected in 6 credit hours minimum of Thesis (BIOL 710), although the effort expended on the thesis research may substantially exceed that typically expended on 6 credit hours of standard course work. Specific information regarding the proposal, thesis preparation, binding and distribution can be found in the Graduate Student Handbook available from the graduate program coordinator.

You must present a public seminar on your thesis research, after you have written the thesis. After the presentation, you must defend the thesis, responding to questions from your Master's Committee concerning your thesis research. It is the responsibility of the student, in consultation with his/her major professor, to notify

the graduate program coordinator as to the time and place of your public seminar at least 10 working days before this event.

Master of Science: Applied Ecology & Conservation Biology

For more information:

Office of Graduate Services
301.687.7053
gradservices@frostburg.edu

Coordinator:

Dr. Thomas Serfass
Department of Biology
301.687.4171
tserfass@frostburg.edu

The Master of Science in Applied Ecology & Conservation Biology program enables students to gain scientific training in addressing conservation issues, especially those pertaining to the persistence of native biotic populations and communities in a changing environment, landscape fragmentation, conservation/development conflicts, watershed assessment and integrated resource management. The program addresses both domestic and international issues, since the need of professionals is broad-based and global.

The program addresses local, regional, national, and international issues pertaining to the conservation of biodiversity. The program is designed to prepare students for professions that require specialized training directed at maintaining biodiversity in natural and human-dominated landscapes. Students completing this program will be prepared for professions that require specialized training directed at maintaining biodiversity, including work with environmental consulting firms, national and international conservation organizations, and state and federal agencies. Graduates of our program also are well-prepared to pursue further graduate education.

Special Admission Criteria

A screening committee composed of FSU Biology and AL faculty will examine your transcripts and determine if your course work meets the requirements listed below. Areas of deficiency will necessitate your taking undergraduate courses that will not be counted toward the 36 credit hours required for the degree program. You must have completed a baccalaureate degree from an accredited college or university. Your undergraduate training must have included 1 year of courses in general biology and general chemistry, and at least one semester of genetics. Additionally, your transcripts must show that you have passed one course in at least three of these eight fields:

- Anatomy or Morphology
- Ecology
- Physiology
- Cellular or Molecular Biology
- Evolution or Systematics
- Natural Resource Management
- Developmental Biology
- Environmental or Earth Science

Program Curriculum

(at least 36 credits)

Core Courses (10 credits)

BIOL 641 Conservation Biology and Reserve Design (3 cr.)
BIOL 643 Ethics, Economics & Politics in Conservation (2 cr.)
BIOL 600 Methods of Research in Biological Sciences (2 cr.)
BIOL 640 Population Conservation Genetics (2 cr.)
BIOL 694 Graduate Seminar in Fish/Wild/AECB (1 cr.)

Electives (14-20 credits)

Electives must be approved by the student's advisor. At least 6 credit hours must be from departments other than Biology.

Capstone (6-12 credits)

BIOL 710 Thesis (6-12 cr.)

* Enroll in the final credit hours of thesis in the semester in which you expect completed thesis to be approved. A minimum of 6 credit hours of thesis is required. Students should work with their advisor to determine the number of thesis credits and number of elective credits which will be required to meet the 36 credit hours for degree completion and to develop a plan which best suits the student's career goals.

Total credit hours: at least 36

Master of Science: Wildlife/Fisheries Biology

For more information:

Office of Graduate Services
301.687.7053
gradservices@frostburg.edu

Coordinator:

Dr. Thomas Serfass
Department of Biology
301.687.4171
tserfass@frostburg.edu

The Wildlife/Fisheries Biology program is designed to prepare you for research and management positions related to natural resource conservation within the public and private sectors. Graduates of the program are also well prepared to pursue further graduate study. The program allows flexibility, yet offers courses necessary for certification with professional organizations such as The Wildlife Society and the American Fisheries Society.

Upon completion of the Wildlife/Fisheries Biology program, you will have achieved a general knowledge and competence in one or more of the following disciplines: aquaculture, aquatic ecology, terrestrial ecology, conservation biology, management techniques, population biology, evolutionary ecology, aquatic toxicology, habitat analysis, systematics and systems modeling.

Special Admission Criteria

A screening committee composed of AL and FSU Biology faculty will examine your transcripts and determine if your course work meets the requirements listed below. Areas of deficiency will necessitate your taking undergraduate courses that will not be counted toward the 36 credit hours required for the degree program.

You must have completed a baccalaureate degree from an accredited college or university. Your undergraduate training must have included 1 year of courses in general biology and general chemistry, one semester of calculus and at least one semester of organic chemistry and statistics. Additionally, your transcripts must show that you have passed one course in at least four of these eight fields of biology:

- Anatomy or Morphology
- Cellular or Molecular Biology
- Developmental Biology
- Ecology
- Evolution or Systematics
- Genetics
- Physiology
- Natural Resource Management

Program Curriculum

(at least 36 credits)

Core Courses (12- credit hours)

BIOL 514 Quantitative Analysis of Vertebrate Populations (3 cr.)
BIOL 550 Ecology and Management of Wildlife Populations
or BIOL 520 Fish Management and Culture (3 cr.)
BIOL 600 Methods of Research in Biological Sciences (2 cr.)
BIOL 694 Graduate Seminar in Fish/Wild/AECB (1 cr.)
MATH 680 Research Statistics (3 cr.)

Elective Courses (12-18 credit hours)

At least 12 credit hours of graduate courses are to be selected with the approval of your advisor and committee members.

Capstone (6-12 credit hours)

BIOL 710 Thesis (6-12 cr.)

* Enroll in the final credit hours of thesis in the semester in which you expect completed thesis to be approved. A minimum of 6 credit hours of thesis is required. Students should work with their advisor to determine the number of thesis credits and number of elective credits which will be required to meet the 36 credit hours for degree completion and to develop a plan which best suits the student's career goals.

Total credit hours: at least 36

Master of Science in Counseling Psychology

For more information:

Office of Graduate Services
301.687.7053
gradservices@frostburg.edu

Program Coordinator:

Dr. Kimberly M James
Department of Psychology
301.687.4194
kmjames@frostburg.edu

Emphasis Options

- **ADDICTIONS COUNSELING PSYCHOLOGY**
- **CHILD AND FAMILY COUNSELING PSYCHOLOGY**

Providing training in professional psychology at the graduate level, the Master of Science in Counseling Psychology program is designed for those pursuing further study in science-based counseling psychology. Our theoretical perspective is integrative, including cognitive-behavioral, family systems, developmental, feminist, multicultural, humanistic, motivational interviewing and brief therapies. We emphasize training in empirically supported treatments for children, adolescents, families and adults.

The Master of Science in Counseling Psychology program is accredited by the Masters in Psychology and Counseling Accreditation Council.

These options are only available to students who are admitted into the counseling psychology master's program at Frostburg State University and eligible for candidacy for the master's degree in counseling psychology.

Program Description

A small faculty-student ratio creates opportunities for frequent, individual interaction throughout the program. Students develop counseling skills through learning about self, client, counselor-client relationships, and the importance of cultural contexts. Considerable attention is given not only to development of professional skills but also to personal development and multicultural awareness. These emphases reflect our belief that an effective counselor is one who is self-aware and receptive to consultation.

The evaluation of students is an integral feature of the program aimed at identifying the student's strengths, needs and characteristics that may need attention in promoting the development of counseling skills. Evaluation takes place several times during the program, including at the end of the first and second semesters of course work, at the time of degree candidacy, and twice during the internship year.

For continuing study at the doctoral level, experience and knowledge gained in this program provide a firm foundation. Optional research opportunities prepare students for advanced graduate study in psychology. The program offers two areas of emphasis to provide specialized training in addictions counseling psychology and child and family counseling psychology. These areas of emphasis are typically completed within the 3-year program of study. All National Counselor Exam (NCE) course areas are offered.

The normal length of the program is 2 years of full-time course work followed by a 1-year internship. Full- and part-time study is available. On completion of this program, students will have met all academic requirements for licensure for each state in the tri-state area (as well as much of the U.S.) in the area of professional counseling.

Special Admission Criteria

In addition to the general admission requirements for all graduate programs, you are required to meet the following criteria:

1. You must have completed the baccalaureate degree at a regionally accredited institution of higher education (verified by an official transcript) with an undergraduate GPA of at least 3.0 on a 4.0 scale. If you have NOT earned at least a 3.0 GPA, you must submit a minimum score of 410 on the MAT or a minimum score of 1,000 (V+Q) (for tests taken prior to August 1, 2011) or 300 (V+Q) (for tests taken on or after August 1, 2011) on the General Test of the GRE. Scores below the above criteria will be considered individually.
2. You must ask three professionals to complete reference forms concerning your suitability for graduate study in counseling psychology. At least two of these references must be from professors who have taught or supervised you.
3. You are to provide a resumé with your application for admission.
4. You are to provide a typewritten statement that will answer questions about yourself. These questions will be supplied by the Office of Graduate Services as part of your application for graduate study.
5. You must interview with the graduate program coordinator. If additional interviews are required, then the coordinator will arrange them. If you cannot arrange to come to the campus for an interview, the coordinator will arrange for a telephone interview. The purpose of the interview is to provide another source of information regarding the applicant's appropriateness for training as a counselor.
6. Undergraduate preparation must include the following courses for a total of 15 credit hours (or their equivalent as determined by the Psychology Admissions Committee):
 - a. Introduction/General Psychology
 - b. Psychological Statistics or Research Methods
 - c. Developmental Psychology (Child, Adolescent or Adult)
 - d. Abnormal Psychology (Adult or Child)
 - e. Tests and Measures*
 - f. Elective in Psychology
7. **Application Deadline:** February 15 for the fall semester. Degree program admissions are made only for the fall semester.
8. **Note:** Some internships sites may require a criminal background check prior to approving students for internship placement.

*Test and Measures – This course can be taken at Frostburg State University (PSYC 508 Tests and Measures) at the beginning of the student's program of study if this prerequisite is not met. If the student has taken some or all of these basic preparation courses at another institution but the courses are not comparable to FSU's, the student will be asked to either take the course(s) at FSU or take an equivalency exam to test out of the course(s):

Course Requirements (60 credits)

General Requirements (42 credits)

PSYC	590	Special Topics in Psychology
PSYC	600	Introduction to Counseling and Assessment
PSYC	602	Advanced Research Evaluation and Interpretation
PSYC	610	Small Group Dynamics/Group Counseling
PSYC	614	Advanced Developmental Psychology
PSYC	616	Psychological Issues in Career Counseling
PSYC	617	Child and Adult Psychopathology
PSYC	619	Professional, Ethical & Legal Issues in Counseling
PSYC	630	Theories and Techniques of Counseling I
PSYC	640	Theories and Techniques of Counseling II
PSYC	650	Family Therapy
PSYC	660	Individual Assessment
PSYC	670	Multicultural Counseling Techniques
PSYC	686	Addiction Issues & Treatment
PSYC	692	Adv. Seminar in Psychology

Internship (14 credits)

A minimum of a total of 14 credits of internship across two semesters:

PSYC	695	Internship in Counseling (6-12 credits)
PSYC	696	Advanced Internship in Counseling (6-12 credits)

Approved Electives (4 credits)

PSYC	504	Psychology of Exceptional Child
PSYC	520	Physiological Psychology
PSYC	530	Health Psychology
PSYC	570	Research Methods Applications
PSYC	581	History and Systems
PSYC	585	Behavioral App. to Human Problems
PSYC	590	Special Topics in Psychology
PSYC	591	Seminar in Psychology

Any 500-level PSYC course

PSYC	680	Advanced Treatment Strategies with Children, Adolescents & Families
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PSYC	698	Readings in Psychology
PSYC	699	Ind. Research in Psychology

Four additional credits of internship (PSYC 694 or 695)

Approved Education Electives

SCCO	608	Lifestyle, Career Development & Decision Making
EDUC	523	AIDS: Information, Instruction and Counseling
EDUC	606	Developmental Theory & Experiential Growth
EDUC	590	Special Topics: AIDS: Peer Counseling and Education

Internship

An important aspect of the program, not often found in master's level studies, is the two-semester internship. The opportunity to intern at one of a variety of sites, for up to 36 hours per week during a 9-month period, provides the student with unusually thorough preparation for eventual employment.

Areas for internship are generally restricted to the Maryland, Pennsylvania, West Virginia region, within commuting distance of Frostburg.

Ongoing supervision is provided by an on-site supervisor. Some internship sites may require a criminal background check prior to approving students for the internship placement.

The program policy is to allow only those students enrolled in our program to enroll and take the field placement, on site supervision, and mandatory on campus group supervision. There are no exceptions to this policy.

Special Degree Requirements

Personal Growth Experience

All students are required to participate in a counseling experience designed to enhance their self-growth and self-awareness. This may be completed through the form of individual counseling and must be 6 hours.

Grade Requirement

Students will be dismissed from the Counseling Psychology Program if they fail a required course (receive an F grade) or obtain two grades below the level of B at any time throughout the program of study. Students may appeal dismissal according to the dismissal appeal policies outlined in the graduate catalog. However, the dean will refer all appeals to the department's Program Committee for recommendations.

Degree Candidacy

The degree candidacy provides a formal mechanism as part of your program of study whereby your academic performance and progress toward completion of degree requirements are evaluated. Criteria for this evaluation are found in the MS in Counseling Psychology Graduate Student Handbook.

Conditions of Degree Candidacy and Internship

It is your responsibility to apply for degree candidacy. Application for degree candidacy must occur during the semester in which you will complete 12 or more credit hours of 600-level program requirements, including PSYC 640. To apply for degree candidacy you must:

1. Have completed all graduate credit taken as approved from Frostburg State University with a cumulative GPA of 3.0 or better
2. Have completed all undergraduate preparation courses and any other course deficiencies as they are listed on your study plan
3. Have completed all required basic preparation courses

Acceptance to degree candidacy must be approved before you apply for the internship. All course work except for electives must be completed prior to interning, and you must have achieved a cumulative GPA of 3.00 or better to intern.

Internship is normally graded on a PASS/NON-PASS basis. To continue in the program and register for Advanced Internship (696), you must receive a PASS in Internship (695). Should you be unable to complete either PSYC 695 or 696 during the semester you initially enrolled, an incomplete (I) may be assigned.

Graduation

In addition to satisfactorily completing the basic master's degree requirements described in this catalog, an exit interview and recommendation for graduation from your Master's Committee (your advisor and one other faculty member) are required. You must apply for graduation according to the schedule listed in the academic regulations section of this catalog.

Transfer/Proficiency Credit

Up to 9 graduate credits may be transferred into this program, based on the requirements set forth in the graduate catalog. Note that credit by examination is not offered as a part of this program.

Psi Chi

Psi Chi is the national honor society in psychology. The major goals of Psi Chi are to honor outstanding psychology students by membership in this society and to foster a climate conducive to the creative development of the society. For complete information, contact the chair of the Department of Psychology.