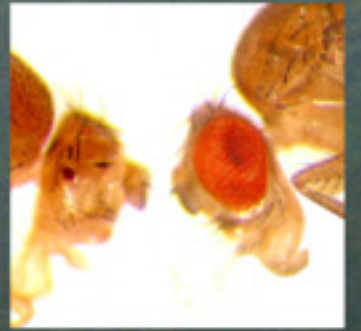
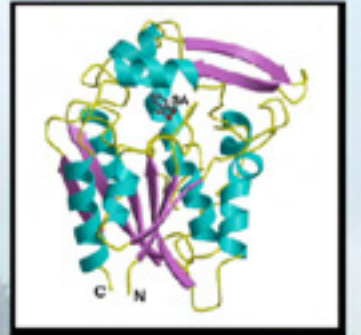


# Life Study



Department of Biological Sciences  
East Tennessee State University

See Where it Takes You



## GRADUATE EDUCATION

Master of Science in Biology with concentrations in Biology, Microbiology, Paleobiology/Paleontology

The Biology master of science degree program is designed to provide a broad-based education in biology while developing research skills. Areas of particular interest to the faculty include anatomy, biochemistry, cell biology, conservation biology, developmental biology, ecology, genetics, immunology, microbiology, natural history, physiology, and systematics. Students successfully completing the M.S. program are encouraged to seek doctoral degrees. The program has some financial support available in the form of Graduate Assistantships and Tuition Scholarships. Decisions on offers of support are initiated at the end of March for the following academic year. In order to receive full consideration for, applicants are encouraged to submit all materials by March 1, although support is sometimes available for students who apply after that date.

### Program Admission Requirements

Students applying for admission to graduate study:

1. Must submit a general GRE score
2. Must have a 3.0 overall grade point average (4.0 system) in mathematics and science courses
3. Must have an undergraduate major in biological sciences or related discipline, with courses in general chemistry and organic chemistry (microbiology concentration will accept one semester of organic and one semester of biochemistry), and one year of physics
4. A course in calculus and/or a course in probability and statistics is recommended.
5. Must have 2-3 letters of recommendation submitted on their behalf.

### Core Course Requirements

The core requirements are as follows:

1. All students must take Bibliographic Research (5600) their first fall semester.
2. BIOL 5500 Biometry is required.
3. Two semesters of Seminar (5700) are required. (All students are expected to attend departmental seminars regularly.)
4. Students will take at least two of the Topics courses (5100, 5200, 5300, 5400). Selection of the appropriate courses will be made in consultation with the student's advisory committee and/or the graduate coordinator.
5. BIOL 5960 Thesis is required

The student will choose a major professor as early as possible, at least by the end of the first semester. To facilitate this selection, during their first semester students will interview faculty members to determine their research interests and explore the potential for student participation in ongoing research programs. The major professor, in consultation with the student, recommends at least two additional members of the student's advisory committee. Persons from outside the program may also be added. The advisory committee will meet with the student to set up the plan of study based on the student's background and interests. The program must be approved by one of the program coordinators. The student's advisory committee will meet with the student a minimum of once per semester to assess progress, check the plan of study being followed, make suggestions and provide supervision as needed. The advisory committee's composition is not binding, and it may be changed upon written justification. It is the student's responsibility to maintain acceptable progress toward the completion of all degree requirements.

All students pursuing an M.S. in Biology are required to complete a thesis. A minimum of 30 semester credits are required for the degree. The thesis (writing) comprises three of the 30 credits. BIOL 5900 and/or 5910 may be taken for a total of nine credits.

Before admission to candidacy, the student must meet the minimum requirements of the Graduate School and the student's advisory committee. Before graduation the student must satisfactorily complete a written qualifying examination preferably near the end of the third semester. One reevaluation is allowed. Failure to complete the evaluation satisfactorily will result in removal from the program. The evaluation will include emphasis on interrelationships, problem solving, and analysis.

Final evaluation involves an oral presentation of the thesis and an oral examination in the area of specialization.

For biology students we offer a concentration in biology and paleobiology/paleontology. For information on the biology or paleontology concentration contact: Dr. Tom Laughlin, Biological Sciences Graduate Coordinator, 337 Brown Hall, 423-439-8459, [laughlin@etsu.edu](mailto:laughlin@etsu.edu)

For health sciences students, we offer a concentration in microbiology. For information on the microbiology concentration contact: Dr. Eric Mustain, Health Sciences Graduate Coordinator, 249H Lamb Hall, 423-439-4571, [mustain@etsu.edu](mailto:mustain@etsu.edu) or refer to: [www.etsu.edu/cphb/hoc/](http://www.etsu.edu/cphb/hoc/)

Based on a student's interests in topics for a thesis, our biology graduate students may choose to work with several faculty members based on the student's interests.

The following information depicts which professors specialize in each major field of study.

## FACULTY (BIOLOGICAL SCIENCES)

### Cell & Molecular Biology, including Physiology & Biochemistry

Ahmad, Zulficar [AhmadZ@Etsu.Edu](mailto:AhmadZ@Etsu.Edu)  
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Stewart, James (Sr Research Scientist) [StewartJ@Etsu.Edu](mailto:StewartJ@Etsu.Edu)  
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Zou, Yue (Adjunct) [ZouY@Etsu.Edu](mailto:ZouY@Etsu.Edu)

### Development

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Pyles, Rebecca (Dean, Honors College) [PylesR@Etsu.Edu](mailto:PylesR@Etsu.Edu)  
Robertson, J. Leonard [RobertJ@Etsu.Edu](mailto:RobertJ@Etsu.Edu)  
Stewart, James (Sr Research Scientist) [StewartJ@Etsu.Edu](mailto:StewartJ@Etsu.Edu)

### Ecology & Evolution, including Paleontology & Paleobiology

Alsop, Fred [AlsopF@Etsu.Edu](mailto:AlsopF@Etsu.Edu)  
Donaldson, James T. (Adjunct Curator)  
Franklin, Jay (Sociology/Anthropology) [FranklinJ@Etsu.Edu](mailto:FranklinJ@Etsu.Edu)  
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### Genetics

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### Quantitative Biology & Modeling

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Jones, Thomas [JonesTC@Etsu.Edu](mailto:JonesTC@Etsu.Edu)  
Joplin, Karl [Joplin@Etsu.Edu](mailto:Joplin@Etsu.Edu)  
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Yampolsky, Lev [Yampolsk@Etsu.Edu](mailto:Yampolsk@Etsu.Edu)

### Biology Education

Miller, Hugh [MillerH@Etsu.Edu](mailto:MillerH@Etsu.Edu)  
Rhoton, Jack (Adjunct) [RhotonJ@Etsu.Edu](mailto:RhotonJ@Etsu.Edu)

## FACULTY (HEALTH SCIENCES)

### Microbiology

Chakraborty, Ranjan [ChakrabR@Etsu.Edu](mailto:ChakrabR@Etsu.Edu)  
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Forsman, Allan [Forsman@Etsu.Edu](mailto:Forsman@Etsu.Edu)  
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Lampson, Bert [Lampson@Etsu.Edu](mailto:Lampson@Etsu.Edu)  
Mustain, Eric [mustain@etsu.edu](mailto:mustain@etsu.edu)  
Osborne, John [OsborneJ@Etsu.Edu](mailto:OsborneJ@Etsu.Edu)  
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*If you have questions regarding the Department of Health Sciences, please do not hesitate to contact us.*

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