BIOLOGY

MASTERS PROGRAMS

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Program Coordinator
Dr. Carl Anthony

Visit us at:
www.jcu.edu/graduate

The Graduate Program in Biology prepares students for professional or teaching careers, or for doctoral studies. The program is structured to offer breadth as well as depth in biological studies, the mastery of essential research techniques, and the ability to communicate effectively the results of creative research and scholarship.

Admission Requirements

- The equivalent of a Bachelor of Science with a major in Biology as offered at John Carroll University.
- A completed application form, official undergraduate transcripts, and at least two letters of academic evaluation from former professors. Applicants will not be accepted into the program until all of these documents have been received and reviewed by the Department and the office of Graduate Studies.

Programs

Master of Science

- Designed for students seeking research experience. Prior to applying, applicants are encouraged to visit the Department of Biology's website in order to determine if applicant's research interests parallel those of the Department faculty.
- Minimum requirements for the degree are 30 semester hours, consisting of 24 hours of credit, at least half of which must be courses numbered above 499, master's thesis proposal (BL598, 1 credit hour), and a research thesis (BL599, 5 credit hours). Participation in the Biology Seminar Program on a regular basis is required. An oral or written examination consisting of questions that reflect the student's educational experience and thesis and that seeks to integrate knowledge across those areas is also required. The examination will be administered by the thesis committee after successful completion of the thesis.

Master of Arts

- This program is designed primarily for secondary school teachers.
- Requirements for the degree are 30 hours of class credit, at least half of which must be courses numbered above 499, including either an independent library research (BL578) or laboratory research experience (BL579). Participation in the Biology Seminar Program on a regular basis is required. Completion requires a take-home written examination consisting of questions that reflect the student's educational experience and that seek to integrate knowledge across that coursework. The examination will be administered by the student's examination committee.

Financial Assistance

- A limited number of graduate assist-antships are available (applications should be made to the Department). Graduate assistants are given a tuition waiver for 15 credit hours per year. Responsibilities include 20 hours per week of participation in course laboratory instruction under the supervision of the Graduate Coordinator and the Laboratory Coordinator.
- The University's Office of Admis-sions and Financial Aid offers assistance on student loans.

Faculty

The following is a list of our faculty and their interests:

- **Carl D. Anthony, Ph.D.** (University of Louisiana at Lafayette). Graduate Coordinator. Behavioral ecology, evolution, herpetology.

- **Valerie R. Flechtner, Ph.D.** (University of Wisconsin-Madison). Genetics, microbiology, phycology.
- **Jeffrey R. Johansen, Ph.D.** (Brigham Young University). Ecology, phycology, biometry, limnology.
- **Erin E. Johnson, Ph.D.** (Medical College of Ohio). Cell biology, immunology.
- **Gwendolyn M. Kinebrew, Ph.D.** (Temple University). Developmental and cell biology.
- **Cyrilla H. Wideman, Ph.D.** (Illinois Institute of Technology). Physiology, endocrinology, cell biology, neuroscience.
- **Rebecca E. Drenovsky, Ph.D.** (University of California, Davis). Botany, ecology.
- **James L. Lissemore, Ph.D.** (University of Wisconsin-Madison). Chair. Molecular genetics, genetics.
- **Michael Martin, Ph.D.** (University of Wisconsin-Madison). Genetics, cell biology.
- **Christopher A. Sheil, Ph.D.** (University of Kansas). Systematic herpetology, skeletal morphology, evolutionary development.