Doctor of Philosophy (Ph.D.)
Biology

Degree Program

1. **Coursework:** A minimum of 60 credit hours of which half must be numbered at the 5000 or 6000 level. **Core:** three hours Biometry or equivalent course in statistics and three semesters of Graduate Seminar and a combination of six credit hours of the following:
   - Biology 5059, Topics in Ecology, Evolution, and Systematics
   - Biology 5069, Topics in Cellular and Molecular Biology
   - Biology 5079, Topics in Floristic Taxonomy.

2. **Qualifying Examination:** A written and oral component based on fundamental principles from courses and in papers of special importance in the field is given in January each year.

3. **Dissertation:** All students must defend orally a written dissertation proposal to their dissertation committee. A dissertation embodying the results of original research must be accepted by the Department of Biology and the Graduate School.

4. **Other Requirements:** At least one semester teaching is required. All students are expected to become involved in a research experience during the first year.

Emphasis Areas and Program Website
Cell and Molecular Biology; Ecology; Evolution; Systematics
http://umsl.edu/go/BiologyPhD

Application Requirements

1. **Application:** [http://umsl.edu/go/Apply-Now](http://umsl.edu/go/Apply-Now)
2. Three letters of recommendation from previous professors
3. Official transcripts from all universities attended
   a. Applicants must have at least a baccalaureate degree with the appropriate background for graduate work in biology, including courses in genetics, biochemistry, and evolution before beginning the program. Courses in organic chemistry, college physics, and calculus are expected.
4. **Entrance examinations**
   a. Graduate Record Examination scores are encouraged but not required ([http://www.gre.org/ttindex.html](http://www.gre.org/ttindex.html)).
   b. International students are required to document English proficiency by providing scores from an internationally accepted standardized examination before a decision is made on admission.
5. **Grade Point Average**
   a. Minimum of 3.0 on 4.0 scale overall

Application Deadline
Fall semester: December 15

Application Fee
$50 for domestic applicants; $40 for international applicants

Assistantships
Assistantships are currently funded at $ 8,000 per academic term plus educational-fee scholarships. Applications for assistantships are sent directly to the Director of Graduate Studies.

Program Director
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