

CATALOG YEAR 2006-2007  
(Please use separate form for each add/change)

COLLEGE/SCHOOL : \_\_\_\_\_  
College of Arts and Sciences

Current Catalog Page(s) Affected \_\_\_\_\_  
pp. 260-261

**Course:** Add: X Delete: \_\_\_\_\_  
(check all that apply) Change: Number \_\_\_\_\_ Title \_\_\_\_\_ SCH \_\_\_\_\_  
Description \_\_\_\_\_ Prerequisite \_\_\_\_\_

If new, provide Course Prefix, Number, Title, SCH Value, Description, prerequisite, and lecture/lab hours if applicable. If in current catalog, copy and paste the text from the and indicate changes in red.

**BIOL 5399 Thesis. Three semester hours.**  
Includes thesis, research, seminar, and defense. To be scheduled by the student in consultation with student's major professor. Prerequisite: Approval of the major professor and the Department Chair. If grade of IP is received, student must enroll again for credit. Evaluation of performance in this course is on CR/NC basis. Laboratory fee: \$30.00.

Justification: New course for the Master of Science in Biology

Approvals:	Signature	Date
Chair Department Curriculum Committee	_____	_____
Chair Department	_____	_____
Chair College Curriculum Committee	_____	_____
Dean	_____	_____

# BIOL 5399

## Thesis

### I. Course

Includes thesis, research, seminar, and defense. To be scheduled by the student in consultation with student's major professor. Prerequisite: Approval of the major professor and the Department Chair. If grade of IP is received, student must enroll again for credit. Evaluation of performance in this course is on CR/NC basis. Laboratory fee: \$30.00.

### II Learning Outcomes:

Student will demonstrate:

1. Knowledge of general biological principles to include:
  - a. Awareness of the diversity of life (organismal and evolution).
  - b. Mechanisms which link all forms of life (morphology, cell & molecular biology, genetics & ecology).
2. The ability to think critically and to integrate factual and conceptual information into an understanding of scientific data.
3. Use of the scientific method to distinguish fact from fiction.
4. The ability to organize data and effectively communicate scientific understanding graphically, orally and in writing.
5. The ability to design and carry out scientific research with appropriate controls in a biological discipline.
6. An in depth understanding or competency in a specific area of biological science.
7. The ability to apply knowledge through critical thinking, inquiry, analysis and written communication to solve problems and produce a thesis or research paper.
8. The ability to effectively communicate with others in the biological sciences.
9. The ability to apply mathematical and statistical approaches to model, analyze and interpret biological information.
10. An understanding of professional ethics as applied to biological research in regards to ownership of intellectual properties and authorship, collaborative efforts with colleagues and the importance of strict adherence to the scientific method.