

DEPARTMENT OF BIOLOGY

GRADUATE PROGRAM GUIDE FOR ZOOLOGY DEGREE

STUDENT NAME: _____ DATE _____

DEGREE: _____

INSTRUCTIONS: Use this form to designate the areas of specialization you intend to satisfy in your degree plan. For Ph.D. students, four (4) areas must be designated, whereas three (3) areas are required for M.S. students. Each chosen area must be fulfilled by passing a course from the approved course list for that area (see attached). A minimum of two (2) semester hours must be completed in each area selected. Alternatively, a faculty member may certify that you have sufficient expertise in an area. In the space below, specify the approved course or provide faculty signatures for the areas you intend to satisfy for your degree. NOTE: the courses selected must appear on the student's degree plan.

	<u>Course</u>	or	<u>Professor's Approval</u>
1. Evolution & Systematics	_____		_____
2. Ecology & Behavior	_____		_____
3. Physiology & Anatomy	_____		_____
4. Biological Mathematics	_____		_____
5. Genetics and Development	_____		_____
6. Cellular & Molec. Biology	_____		_____

We certify that _____ will be required to demonstrate competence in the areas listed above by taking and completing with a grade of B or better the courses named, or by demonstrating expertise in the area to our satisfaction. All work must be completed prior to the preliminary examination for Ph.D. students.

_____ Chair

_____ Member

_____ Member

_____ Member

Member

Student

COURSES THAT FULFILL GRADUATE REQUIREMENTS FOR THE ZOOLOGY DEGREE

EVOLUTION AND SYSTEMATICS

- BIOL 616 Biochemical Systematics and Evolution (4)
- ZOOL 653 Zoogeography (3)
- WFSC 601 Vertebrate Systematics (3)

ECOLOGY AND BEHAVIOR

- ZOOL 660 Aquatic Ecology (4)
- WFSC 603 Vertebrate Ecology (3)
- WFSC 620 Vertebrate Ethology (4)
- WFSC 622 Behavioral Ecology of Vertebrates (3)
- OCNG 622 Analysis of Benthic Communities (3)

PHYSIOLOGY AND ANATOMY

- ZOOL 601 Biological Clocks (3)
- ZOOL 634 Comparative Neurobiology (3)
- ZOOL 649 Comparative Endocrinology (4)
- ZOOL 665 Biology of Invertebrates (4)
- ENTO 615 Insect Physiology (3)
- VAPH 603 Neuroanatomy (4)
- VAPH 604 Neuroendocrine Anatomy (4)
- VAPH 640 Neurobiology (4)
- VTPP 653 Endocrinology (4)
- WFSC 616 Physiological Ecology of Vertebrates (4)

BIOLOGICAL MATHEMATICS

- STAT 651 Statistics in Research I (3)
- STAT 652 Statistics in Research II (3)
- WFSC 604 Systems Analysis and Simulation in Ecology (3)
- BMEN 614 Modeling of Biomedical Systems (3)
- GENE 613 Quantitative Genetics (3)

GENETICS AND DEVELOPMENT

- BIOL 611 Molecular Biology of Differentiation and Development (3)
- BIOL 674 Cellular & Molecular Aspects of Development (3)
- GENE 603 Genetics (4)
- GENE 612 Population Genetics (3)
- GENE 620 Cytogenetics (3)
- GENE 654 Analysis of Complex Genomes (3)

CELLULAR AND MOLECULAR BIOLOGY

- BIOL 617 Cell Biology (2 to 5)
- BIOL 635 Plant Molecular Biology (3)
- BIOL 636 Plant Cell Biology (3)
- BICH 631 Biochemical Genetics (3)
- VTPP 654 Molecular Endocrinology (4)

These courses are a guide for the Advisory Committee and the student. Other courses and 689 Special Topics or 685 Problems may be substituted with the approval of the Committee as evidenced by signatures on the Departmental Graduate Program Guide.