**GENETICS Program**
*College of Natural Science*

**800** Genetics Seminar  
Fall, Spring, Summer. 1(1-0) A student may earn a maximum of 12 credits in all enrollments for this course.  
Critical analysis of current literature. Student presentations.

**810** Theory and Practice of Teaching Genetics  
Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. RB: One year of graduate coursework and satisfactory completion of an undergraduate-level genetics course. International students must have passed the SPEAK test. R: Open to graduate students in the College of Natural Science.  
Techniques and challenges in teaching microbial, molecular, or human genetics at the college level.

**835** Eukaryotic Molecular Genetics  
Spring. 3(3-0) Interdepartmental with Microbiology and Molecular Genetics. Administered by Microbiology and Molecular Genetics. RB: BMB 462 and ZOL 341 R: Open only to graduate students in the colleges of Agriculture and Natural Resources, Engineering, Human Medicine, Natural Science, Osteopathic Medicine, and Veterinary Medicine.  
Gene structure and function in animals, plants, and fungi. Basic aspects of modern human genetics and the genetic basis for disease. Molecular genetic analyses. Eukaryotic modeling systems.

**840** Genetics Writing Skills  
Fall, Spring, Summer. 1(1-0) A student may earn a maximum of 6 credits in all enrollments for this course. R: Open to graduate students in the Genetics major. Approval of department.  
Development of a genetics research proposal: content, composition, and peer review through a graduate writing group.

**851** Insect Physiology and Molecular Biology  
Fall of odd years. 3(3-0) Interdepartmental with Entomology. Administered by Entomology. RB: General entomology (ENT 404 or equivalent); general biology (organismal and cellular); genetics  
Structure and function of physiological systems in insects, and current understanding of how these systems work at the molecular level.

**880** Laboratory Rotation  
Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Open to doctoral students in the Genetics major.  
Participation in research with faculty members.

**890** Independent Study  
Fall, Spring, Summer. 1 to 9 credits. A student may earn a maximum of 10 credits in all enrollments for this course. R: Open to graduate students in the Genetics major or approval of department.  
Non-thesis research for Plan B master's students.

**891** Selected Topics in Genetics  
Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 9 credits in all enrollments for this course. Genetics topics, trends, or issues of current interest.

**899** Master's Thesis Research  
Fall, Spring, Summer. 1 to 9 credits. A student may earn a maximum of 36 credits in all enrollments for this course.  
Master's thesis research.

**999** Doctoral Dissertation Research  
Fall, Spring, Summer. 1 to 24 credits. A student may earn a maximum of 36 credits in all enrollments for this course. R: Open to doctoral students in the Genetics major.  
Doctoral dissertation research.