### **GENETICS GEN**

# **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

Techniques and challenges in teaching microbial, molecular, or human genetics at the college level.

## **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.

### **Genetics Writing Skills** 840

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 Program or 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.

### 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.

#### **Doctoral Dissertation Research** 999

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 Program or in the Genetics Major.

Doctoral dissertation research.