

## ADDITIONAL COURSES WITH A GENETIC COMPONENT

[Please consult the General Catalog and/or the quarterly Class Schedule & Registration Guide to verify this information.]

### General Genetics

#### Graduate

- AVS 298 (F) Avian Development & Genetics (F11 CRN 54575)
- PLS 222 (Sp) Advanced Plant Breeding

#### Upper Division Undergraduate

- ANG 107 (F) Genetics & Animal Breeding
- ANT 151 Primate Evolution
- ANT 152 Human Evolution
- AVS 103 Avian Development & Genetics
- BIT 160 (W) Plant Biotechnology
- ETX 198 (W) Genes and the Environment
- MCB 121 (W/Sp) Molecular Biology of Eukaryotic Cells
- MCB 162 (F) Human Genetics
- MCB 163 (W) Developmental Genetics
- MCB 164 (Sp) Advanced Eukaryotic Genetics
- MIC 150 (W) Bacterial Genetics
- MIC 170 (Sp) Yeast Molecular Genetics
- PLS 152 (F) Plant Genetics
- PLS 154 (W) Introduction to Plant Breeding

### Molecular Genetics

#### Graduate

- ANG 212 (W) Sequence Analysis in Molecular Genetics (*alternate years*)
- MCB 210 (F) Molecular Genetics & Genomics
- MCB 255 (Sp) Molecular Mechanisms in Pattern Formation & Development
- MCB 256 (F) Cell and Molecular Biology of Cancer
- MCB 257 (F) Cell Proliferation and Cancer Genes
- MCB 263 (W) Biotechnology Fundamentals & Applications
- MIC 200A (F) Biology of Prokaryotes
- MIC 215 (F) Recombinant DNA
- MIC 250 Biology of Yeasts (*not offered every year*)
- MIC 263 Principles of Protein-Nucleic Acid Interactions (*not offered every year*)
- PBI 227 (W) Plant Molecular Biology

#### Upper Division Undergraduate

- ANG 111 (F) Molecular Biology Laboratory Techniques
- BIS 102 (F/W/Sp) Structure and Function of Biomolecules
- MCB 121 (F/W/Sp) Advanced Molecular Biology
- MCB 126 (W) Plant Biochemistry
- MCB 160L (F/W/Sp) Principles of Genetics Laboratory
- NPB 161 (Sp) Developmental Neurobiology
- PLB 113 (Sp) Molecular & Cellular Biology of Plants

### Cytogenetics

#### Graduate

- PLS 221 (Sp) Genomics & Breeding of Vegetable Crops

#### Upper Division Undergraduate

- ANG 101 Animal Cytogenetics

### Population Genetics

#### Graduate

- EVE 210 Molecular Phylogenetic Analysis (*alternate years*)
- PBG 200A (F) Principles of Population Biology
- PGB 200B (W) Principles of Population Biology
- PGB 200C (Sp) Principles of Population Biology

### **Conservation and Ecological Genetics**

#### Graduate

ECL 208 (W) Issues in Conservation Biology  
PHR242/ECL242 (W) Ecological Genetics  
ECL2XX Landscape Genetics w/GIS (*in process*)  
PHR 243 (F) Advanced Topics in Conservation Genetics

#### Upper Division Undergraduate

ANT 153 Human Biological Variation  
EVE 102 (F) Population and Quantitative Genetics

### **Quantitative Genetics**

#### Graduate

ANG 204 (Sp) Theory of Quantitative Genetics (*alternate years*)  
ANG 206 (Sp) Advanced Domestic Animal Breeding (*alternate years*)  
PLS 220/GGG 220 Genomics & Biotechnology of Plant Improvement

### **Medical Genetics**

#### Graduate

PHA 225 Gene Therapy (Sp; *alternate yrs w/ PHA 250*)  
PHA 250 Functional Genomics: From Bench to Bedside (Sp: *alternate yrs w/PHA 250*) (*offered Sp 12*)

### **Evolutionary Genetics**

#### Upper Division Undergraduate

EVE 100 (F/W/Sp) Introduction to Evolution  
EVE 103 (W) Phylogeny and Macroevolution (*alternate years*)

### **Biotic Stresses in Plants**

#### Graduate

PLP 210 (F) Biochemistry & Molecular Biology of Plant-Microbe Interaction

#### Upper Division Undergraduate

PLP123/PLB123/ENT123 (F) Plant-Virus-Vector Interaction

### **Human/Primate Genetics**

#### Graduate

ANT 252 Human Evolution Seminar

#### Upper Division Undergraduate

ANT 153 Human Biological Variation  
ANT 157 Anthropological Genetics  
ANT 157L Laboratory in Anthropological Genetics  
MCB 162 (F) Human Genetics

### **Statistics/Bioinformatics**

#### Graduate

STA 226 (W) Statistical Methods for Bioinformatics

#### Upper Division Undergraduate

ECS 124 (Sp) Theory & Practice of Bioinformatics  
STA 100 (F/W/Sp) Applied Statistics for Biological Sciences  
STA 131A (F/W/Sp) Introduction to Probability Theory

### **Forensic Sciences**

#### Graduate

FOR 280 (W) Forensic DNA Analysis  
FOR 281 (Sp) Principles & Practice of Forensic DNA Typing

### **Graduate Seminar Courses**

AVS 290 (F/Sp) Seminar in Avian Genetics, Physiology, etc.  
BCM 291 (F/W/Sp) Seminar in Genetic Approaches to Pathogenesis of Human Disease  
MIC 274 (F/W/Sp) Seminar in Genetic Recombination (*not offered every year*)

