# Genetics-Interdisciplinary (GENET)

#### Courses primarily for graduate students, open to qualified undergraduates:

## GENET 539. Ethics and Biological Sciences.

#### (2-0) Cr. 2. S.

Introduction to Bioethics through case study discussion and recent news events. Students will read and discuss contemporary issues in science ethics, including some of the following topics: ethics and responsible research practice, animal ethics and the use of animals in teaching and research, cloning, human reproductive and stem cell research, regulation of genetically modified crops and foods, plant biotechnology, gene patents. Students will be divided into groups to develop their own case study, to be presented in class at the end of the term. Offered on a satisfactory-fail basis only.

#### GENET 565. Professional Practices in Sciences and Engineering.

(Cross-listed with AGRON, AN S, BBMB, BCB, CH E, CPR E, EEB, HORT, M E, MICRO). Cr. arr. *Prereq: Graduate Classification* 

Professional, ethical and legal issues facing scientists and engineers in academia. Offered in modular format.

# GENET 565A. Responsible Conduct of Research. (Cr. 1.0). F,.

(Cross-listed with AGRON, AN S, BBMB, BCB, CH E, CPR E, EEB, HORT, M E, MICRO). Cr. arr. *Prereq: Graduate Classification* 

Professional, ethical and legal issues facing scientists and engineers in academia. Offered in modular format.

# GENET 565B. Working with Industry. (Cr. 0.5)..

(Cross-listed with AGRON, AN S, BBMB, BCB, CH E, CPR E, EEB, HORT, M E, MICRO). Cr. arr. *Prereq: Graduate Classification* 

Professional, ethical and legal issues facing scientists and engineers in academia. Offered in modular format.

# GENET 565C. Communications in Science. (Cr. 0.5). Alt S., offered 2011. Reading and reviewing manuscripts; publishing papers; oral and poster presentations..

(Cross-listed with AGRON, AN S, BBMB, BCB, CH E, CPR E, EEB, HORT, M E, MICRO). Cr. arr. Prereq: Graduate Classification

Professional, ethical and legal issues facing scientists and engineers in academia. Offered in modular format.

# GENET 565D. Time Management and Mentoring. (Cr. 0.5). Alt F., offered 2012. Balancing life and career; mentoring; lab management..

(Cross-listed with AGRON, AN S, BBMB, BCB, CH E, CPR E, EEB, HORT, M E, MICRO). Cr. arr. *Prereq: Graduate Classification* 

Professional, ethical and legal issues facing scientists and engineers in academia. Offered in modular format.

# GENET 565E. The Interview Process. (Cr. 0.5). Alt S., offered 2012. Applying and interviewing for academia, industry and government..

(Cross-listed with AGRON, AN S, BBMB, BCB, CH E, CPR E, EEB, HORT, M E, MICRO). Cr. arr. *Prereq: Graduate Classification* 

Professional, ethical and legal issues facing scientists and engineers in academia. Offered in modular format.

# GENET 565F. Grant Writing. (Cr. 1.0). Alt F., offered 2011. Writing a winning proposal..

(Cross-listed with AGRON, AN S, BBMB, BCB, CH E, CPR E, EEB, HORT, M E, MICRO). Cr. arr. *Prereq: Graduate Classification* 

Professional, ethical and legal issues facing scientists and engineers in academia. Offered in modular format.

# GENET 565G. Teaching. (Cr. 0.5)..

(Cross-listed with AGRON, AN S, BBMB, BCB, CH E, CPR E, EEB, HORT, M E, MICRO). Cr. arr. *Prereq: Graduate Classification* 

Professional, ethical and legal issues facing scientists and engineers in academia. Offered in modular format.

# GENET 565S. Establishing productive collaborations with industry..

(Cross-listed with AGRON, AN S, BBMB, BCB, CH E, CPR E, EEB, HORT, M E, MICRO). Cr. arr. *Prereq: Graduate Classification* 

Professional, ethical and legal issues facing scientists and engineers in academia. Offered in modular format.

# **GENET 590. Special Topics.**

Cr. arr. Repeatable. F.S.SS. Contact individual faculty for special projects or topics. Graded.

# **GENET 591. Workshop in Genetics.**

(1-0) Cr. 1. Repeatable. F. *Prereq: Permission of instructor* Current topics in genetics research. Lectures by off-campus experts. Students read background literature, attend preparatory seminars, attend all lectures, meet with lecturers.

# Courses for graduate students:

# **GENET 690. Graduate Student Seminar in Genetics.**

(1-0) Cr. 1. Repeatable. F.S. *Prereq: Permission of instructor* Research presentations by students to improve their ability to: orally present scientific work in a clear and meaningful way, critically evaluate oral presentations, and give and receive constructive criticism. Students may enroll in one seminar per school year. ..

# **GENET 691.** Faculty Seminar in Genetics.

(1-0) Cr. 1. Repeatable. F. Prereq: Permission of instructor Faculty research seminars that introduce students to the variety of genetics research projects on campus and provide an opportunity for students to become engaged in the scientific presentation to the point where they can think critically and ask meaningful questions.

## **GENET 692.** Conceptual Foundations of Genetics.

(1-0) Cr. 1. F. Prereq: Permission of instructor

Landmark papers in the development of genetics concepts. Papers are presented and discussions led by students, guided and mentored by the instructors. Instructors provide a broad overview and history of the development of fundamental concepts in genetics.

# GENET 697. Graduate Research Rotation.

Cr. arr. Repeatable. F.S.SS.

Graduate research projects performed under the supervision of selected faculty members in the graduate Genetics major.

## GENET 699. Research.

Cr. arr. Repeatable, F.S.SS.