# GENETICS (GENE)

**GENE 200 (s) Seminar (1-16 credits)**
Credit arranged

**GENE 207 Introduction to Biotechnology (3 credits)**
Cross-listed with PLSC 207
Offers an overview of modern biotechnology, focusing on basic concepts and applications of biotechnology with regards to plants, animals, environment and microorganisms, and medicine. Recommended preparation: CHEM 101 or CHEM 111. (Fall, alt/even years)

**GENE 299 (s) Directed Study (1-16 credits)**
Credit arranged

**GENE 314 General Genetics (3 credits)**
Principles of molecular genetics, microbial genetics, cytogenetics, qualitative genetics, quantitative genetics, and population genetics. (Spring only)
**Prereqs:** BIOL 115 or Permission

**GENE 400 (s) Seminar (1-16 credits)**
Credit arranged

**GENE 440 Advanced Laboratory Techniques (4 credits)**
Cross-listed with PLSC 440
Intensive hypothesis-driven laboratory course that will prepare the student for research in molecular biology; emphasis on areas of microbial physiology, microbial genetics, immunology, and pathogenic microbiology. (Spring only)
**Prereqs:** BIOL 250.

**GENE 488 Genetic Engineering (3 credits)**
Cross-listed with PLSC 488
Joint-listed with GENE 588 and PLSC 588
Techniques and theory underlying practical genetic modifications of plants, microbes, and animals. Extra oral and/or written assignments required for graduate credit. Recommended Preparation: BIOL 380. (Fall only)
**Prereqs:** GENE 314 or BIOL 310.

**GENE 499 (s) Directed Study (1-16 credits)**
Credit arranged

**GENE 501 (s) Seminar (1-16 credits)**
Credit arranged

**GENE 502 (s) Directed Study (1-16 credits)**
Credit arranged

**GENE 588 Genetic Engineering (3 credits)**
Cross-listed with PLSC 588
Joint-listed with GENE 488 and PLSC 488
Techniques and theory underlying practical genetic modifications of plants, microbes, and animals. Extra oral and/or written assignments required for graduate credit. Recommended Preparation: BIOL 380. (Fall only)
**Prereqs:** GENE 314 or BIOL 310.