

CALIFORNIA STATE UNIVERSITY, STANISLAUS
DEPARTMENT OF BIOLOGICAL SCIENCES
GENETICS and BIOTECHNOLOGY CONCENTRATION

Students wishing to have a specific concentration in GENETICS may do so by completing all the requirements for a major in biological sciences, to include specific concentration requirements listed below.

- a. Complete the following required courses:
 BIOL 3310 Cellular and Molecular Biology, 3 units
 BIOL 3350 Introductory Genetics, 3 units
- b. Complete one of the following courses:
 BIOL 4870 Recombinant DNA, 2 units or
 BIOL 4850 DNA Technology in Forensic Science, 2 units
- c. Complete one of the following courses and corresponding lab:
 CHEM 4400 and 4402 Biochemistry I, 4 units, or
 MBIO 3010 and 3032 Bacteriology, 5 units
- d. Complete two additional advanced genetics courses selected from:
 BIOL 4820 Medical Genetics 3 units, or
 BIOL 4830 Evolution and Population Genetics, 2 units, or
 BIOL 4840 Genetic Biotechnology, 3 units, or
 BIOL 4860 Cell Culture and Advanced Biotechnology, 2 units

A SAMPLE PROGRAM FOR THE B.S. DEGREE IN THE BIOLOGICAL SCIENCES

FALL SEMESTER	WINTER TERM	SPRING SEMESTER
Freshman Year		
	Electives.....4	
BIOL 1050.....4		BIOL 1150.....4
CHEM 1100.....5		CHEM 1110.....5
MATH or G.E.		MATH or G.E.
Electives.....4-5		Electives.....4-5
Total Units 13-14		Total Units 13-14
Sophomore Year		
Animal or Plant Science.....4	Electives....4	Animal or Plant Science.....4
PHYS 2100 or CHEM 3010, 3012...4-5		PHYS 2110 or CHEM, PHYS or
G.E. Electives.....6		Math Electives.....4-5
Total Units 14-15		G.E. Electives.....6
		Total Units 14-15
Junior Year		
	Electives....4	
BIOL 3350.....3		BIOL 3310.....3
Biol. Sci. Elective...4-5		Biol. Sci. Electives.....6
CHEM 3010, 3012 or PHYS 2100.....4-5		PHYS 2110 or CHEM Electives.....4-5
Total Units 11-13		Total Units 13-14
Senior Year		
Ecol. or Physiol.....4	Electives....4	Ecol. or Physiol.....4
Biol. Sci. Elective.....4		Electives.....9
G.E. Electives.....3		
Elective.....3		
Total Units 14		Total Units 13

NOTE: Refer to the current university catalog for General Education (G.E.) and Math requirements. Many professional schools require a full year of calculus.