

**Microbiology** – track for application to the Post-Baccalaureate Program in Clinical Laboratory Science.  
 (underlined = required for CLS admission and by Calif. Dept. Health Services for the CLS License)

Year 1		Year 2		Year 3		Year 4	
Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring
Math 226 (Calc I, 4 units) or Math 124 (Stat) (3)	Biol 230 Gen Biology I (5)	Biol 240 Gen Biology II (5)	Biol 355 Genetics (3)	Biol 401/402 Gen Micro + <b>Lab</b> (3/2)	<b>Biol 430</b> Med Micr (*) (3)	Biol 612 Hum. Physiol. (3)	<b>Biol 625</b> Hematology <b>(Lab)</b> (3)
or Biol. 458 (Biostatistics) (4)	Chem 130 Gen Org Chem (3)	Phys 111/112 Phys I + lab (3/1)	Phys 121/122 PhysI+ lab (3/1)	Chem 215/216 ChemI+lab (3/2)	<b>Chem 321- 322</b> Analyt Chem + <b>Lab</b> (3/2)	Chem 349 Gen Biochem (3)	<b>Biol 435</b> Immuno (*) (3)
Chem 115 Chem I (5)						Elective (*)	
						(*) at least one must have a <b>lab</b>	

**Electives** (15 units) may be chosen from the following list with advisor approval - two courses must include lab.

→ **Required** for admission to CLS Post-bac programs and by Cal. Dept. of Health Services (*but are electives for Biology degree*).

→ **Biol 430** (Med Micro, 3, F/Sp) (prerequisite Biol 401/402)

→ **Biol 435** (Immunology, 3, F/Sp) (prerequisite Biol 350 OR Biol 401)

→ **Biol 625** (Hematology, 2, Sp, counts as a **Lab**) (prerequisite Biol 612)

Biol 391 (Microscopy & Photomicroscopy, 2, Sp, counts as a **Lab**) (prerequisite: one course in college physics)

Biol 420 (Virology, 3, Fall) (prerequisite Biol 401/402)

Biol 425 (Emerging Diseases, 3, Fall) (prerequisites Biol. 230 & 240, one of B.355, 401, or 350 AND one of Chem 130 or 233).

Biol 431 (Med Micro Lab, 2, F) [prerequisite Biol 401, 402, and 430 (concurrent enrollment in 430 allowed)]

Biol 436 (Immunology Lab, 2, Sp) [prerequisite Biol 402 and either 435 or 343 (concurrent enrollment in 435 or 343 allowed)]

Biol 446 (Microbial Genomics, 4, Sp, counts as a **Lab**) (prerequisite Biol 401, 402 & 355)

Biol 453 (Parasitology, 3, F/S) (prerequisite Biol 230, 240 and 355)

Biol 454 (Parasitology lab, 2, F)

Biol 638/738 (Bioinformatics, 4, counts as a **Lab**) (prerequisite Biol 230).

Courses not in the electives list require PRIOR advisor approval for acceptance. Examples: Biol. 350 Cell Biol (F/S), 357 Mol. Genet. (F/S), Chem 321-322 Analyt. Chem. (F/S, 5) etc...). Students may also enroll in Biol 699 (Independent Study, 1-3 units) to perform independent research. Biol 699 requires a 3.0 GPA and development of a research project with a member of the Biology faculty. If approved, Biol. 699 can satisfy one of two elective labs.

**Notes:** Chem 234 (Org Chem I lab) is a prerequisite for Chem 343 (Biochem lab). Many professional schools (medicine & pharmacy) require the full year of Org Chem with labs (Chem 233/234 and 335/336).

This plan is a RECOMMENDATION only. It is designed so that two major science classes are taken each semester (except in Year 4). It is possible to take three science courses if you are prepared. Check the prerequisites of courses to see if you can take a course earlier in this scheme.