

B.S. in BIOLOGICAL SCIENCES
(Anatomy and Physiology Concentration)
Suggested 4-Year Academic Flowchart

Updated 3/5/2020

FRESHMAN			SOPHOMORE			JUNIOR			SENIOR		
Fall	Winter	Spring	Fall	Winter	Spring	Fall	Winter	Spring	Fall	Winter	Spring
Diversity & History of Life BIO 160 (4)	Intro to Cell & Molecular Biology BIO 161 (4) (Recom: CHEM 110, 111, 124, or 127) [B2 & B3]	Intro to Organismal Form & Function BIO 162 (4) (BIO 161. Recom: CHEM 110, 111, 124, or 127)	Introductory Ecology & Evolution BIO 263 (4) (BIO 160 or 161)	Physiology Course BIO 361 (4) (BIO 162; & CHEM 216, 312, or 316)	Ecology (choose one) BIO 327, 363, 442; BOT 326; MCRO 436; MSC1 300 (4)*	Principles of Genetics BIO 351 (5) (BIO 161; CHEM 216, 312, or 316)	Elective (4) ³ *		Evolutionary Medicine or Evolution (choose one) BIO 413 or 414 (4) *		
	Calculus for the Life Sciences I MATH 161 (4) * [B4]	Calculus for the Life Sciences II MATH 162 (4) (MATH 161) [GE Elective]		Applied Statistics for the Life Sciences STAT 218 (4) *			Elective (4) ³ *		Senior Project BIO 461 or 462 (2) *		
							Elective (3) ³ *		Cell Biology BIO 452 (4) (BIO 351 or CHEM 373; CHEM 216, 312, or 316. Recom: CHEM 313 or 371)		
General Chem for Agriculture & Life Science I CHEM 127 (4) * [B1 & B3]	General Chem for Agriculture & Life Science II CHEM 128 (4) (CHEM 127 or AP CHEM score of 5)	General Chem for Agriculture & Life Science III CHEM 129 (4) (CHEM 128)		College Physics I PHYS 121 (4) (MATH 118 or 119)	College Physics II PHYS 122 (4) (PHYS 118, 121, 131, or 141)	College Physics III PHYS 123 (4) (PHYS 118, 121, 131, or 141. Recom: PHYS 122)	Core Anatomy & Physiology Course (4) ⁴ *		Core Anatomy & Physiology Course (4) ⁴ *	Core Anatomy & Physiology Course (4) ⁴ *	Core Anatomy & Physiology Course (4) ⁴ *
Expository Writing ENGL 133/134 (4)** [A2]			Biodiversity Course (4) ² *			CHEM 313 (5) (CHEM 212, 216, 312, or 316) OR CHEM 371 (5) (CHEM 217 or 317; BIO 161)			GE (4) **		
Oral Communication COMS 101/102 (4)** [A1]			GE (4) **	GE (4) **	GE (4) **	GE (4) **	GE (4) **	GE (4) **	GE (4) **	GE (4) **	GE (4) **
Free Elective (2) ¹	Free Elective (2) ¹	Free Elective (1) ¹							GE (4) **		
	Reasoning, Argumentation, & Writing [A3] COMS 126; COMS/ENGL 145; ENGL 148; PHIL 126 (4) ** (Completion of GE A2 with a C- or better) Can be taken anytime between Winter of Freshman and Winter of Sophomore Years.					Graduation Writing Requirement GWR* (Students can attempt to fulfill the requirement after 90 earned units; students should complete the requirement before senior year)					
14	18	17	17	16	12	13	13	15	14	15	16
									TOTAL:		180

Notes:

MOST GENERAL EDUCATION COURSES CAN BE TAKEN IN ANY ORDER AS LONG AS PREREQUISITES ARE MET.

* Refer to current catalog for prerequisites.

** One course from each of the following GE areas must be completed: A1, A2, A3, Upper-Division B, C1, C2, Lower-Division C Elective, Upper-Division C, D1, D2, D2, Upper-Division D, E, and GE Electives. Upper-Division B, Upper-Division C, and Upper-Division D should be taken only after Junior standing is reached (90 units).

Refer to online catalog for GE course selection, United States Cultural Pluralism (USCP) and Graduation Writing Requirement (GWR).

USCP requirement can be satisfied by some (but not all) courses within GE categories: Upper-Division B, C1, Upper-Division C, D1, D2, Upper-Division D, or E.

¹5 units of Free Electives required. SCM 150 workshops for Math/Science courses recommended for remaining units.

²See catalog for course options. MCRO 224 recommended for students interested in health sciences careers.

³14 units of Electives required. See catalog for course options. Cannot double-count with other major requirements.

⁴16 units of Core Anatomy & Physiology Courses required. See catalog for course options.

For information on health profession careers, refer to the pre-health website: www.prehealth.calpoly.edu

Legend:

Course Title	
Course # (Units)	
(Prerequisite)	
[GE Area]	
Major (35)	
Support (41)	
Concentration (43)	
General Ed. (56)	
Free Electives (5)	