



Department of Biology

Bachelor of Science, Molecular and Cell Biology Specialization

Four-Year Academic Road Map

Sample only— academic advisors will help create an individualized plan. Students with more than one program should communicate with their advisor prior to enrollment. *Upper-division major electives should be selected in consultation with departmental faculty mentors.

YEAR 1	Fall Quarter		Winter Quarter		Spring Quarter		
	UNIV 101	Transition to CWU	BIOL 181	General Biology I	BIOL 182	General Biology II	
	BIOL 105*	Exploring Biology	CHEM 181	General Chemistry I	CHEM 182	General Chemistry II	
	MATH 152**	Functions and Reasoning	CHEM 181Lab	General Chemistry Lab I	CHEM 182Lab	General Chemistry Lab II	
	ENG 101	Academic Writing I	MATH 153	Pre-Calculus I	K1 Academic Writing II (ex: ENG 111)		
Total Quarter Credits		15	Total Quarter Credits		15	Total Quarter Credits	15

YEAR 2	Fall Quarter		Winter Quarter		Spring Quarter		
	BIOL 183	General Biology III	BIOL 213	Biostatistics	Elective/2 nd Program course		
	CHEM 183	General Chemistry III	CHEM 361	Organic Chemistry I	CHEM 362	Organic Chemistry II	
	CHEM 183Lab	General Chemistry Lab III	CHEM 361Lab	Organic Chemistry Lab I	K2 Cmty. Cult. & Citizenship (ex: LIS 245)		
	K5 Humanities (ex: PHIL 104)		K8 Science & Technology (ex: NUTR 101)		Elective/2 nd Program course		
Total Quarter Credits		15	Total Quarter Credits		14	Total Quarter Credits	17

YEAR 3	Fall Quarter		Winter Quarter		Spring Quarter		
	BIOL 355†	Human Anatomy & Phys I	BIOL 356†	Human Anatomy & Phys II	BIOL 457†	Fund. Of Neuroscience	
	CHEM 431	Biochemistry I	BIOL 430	Cell Biology	K4 Global Dynamics (ex: IDS 343)		
	Elective/2 nd Program course		BIOL 454†	Histology	Elective/2 nd Program course		
	BIOL 321	Genetics	K6 Individual & Society (ex: PHYS 213)				
Total Quarter Credits		16	Total Quarter Credits		17	Total Quarter Credits	15

YEAR 4	Fall Quarter		Winter Quarter		Spring Quarter		
	BIOL 323†	Microbiology	BIOL 426†	Medical Microbiology	BIOL 425	Molecular Biotechnology	
	BIOL 421†	General Virology	BIOL 426L†	Medical Microbiology Lab	Elective/2 nd Program course		
	BIOL 422†	Immunology	BIOL 446†	Endocrinology	Elective/2 nd Program course		
			BIOL 487	Biology Capstone			
		K3 Creative Expression (ex: COM 250)					
Total Quarter Credits		15	Total Quarter Credits		13	Total Quarter Credits	15
Total Credits: 182							

*May not be required if student is eligible for BIOL 181 and CHEM 181

**Assumes placement into MATH 152. If placement requirements are not met or if placement is beyond MATH152, your advisor will help you create a suitable first-year Math sequence to set you up for success.

†These courses may be customized for a student’s career aspirations. Please work with your professional advisor or faculty mentor for an academic plan that best serves your career interests.

Suggested second programs: Chemistry minor, Psychology minor

Department Webpage



CWU Course Catalog



General Education



General Degree Requirements

