## **Bachelor of Science in Biology with Biomedical Sciences Concentration**

2024-2025 Catalog

credits quarter?

In order to earn the Bachelor of Science in Biology degree from Seattle University, students must complete a minimum of 180 quarter credits with cumulative and major grade point averages of 2.0, including these courses:

			preregs	creans	quarter?
I. Core Curriculum	UCOR 1100	Academic writing seminar	_	5	
Requirements:	UCOR 1300	Creative expression and interpretation	_	5	
	UCOR 1400	Inquiry seminar in humanities	_	5	
	UCOR 1600	Inquiry seminar in social sciences	_	5	
	UCOR 2100	Theological explorations	UCOR 1100	5	
	UCOR 2500	Philosophy of the human person	UCOR 1100	5	
	UCOR 2900	Ethical reasoning	UCOR 2500	5	
	UCOR 3100	Religion in a global context	UCOR 2100	5	
	UCOR 3400	Humanities and global challenges	75 cr + UCOR 1400	5	
	UCOR 3600	Social science and global challenges	75 cr + UCOR 1600	5	

Note: UCOR 1200 and UCOR 1800 are not listed above; they are fulfilled by other Biology major requirements.

II. Biology	BIOL 1400	Biology First-Year Experience	1	F	
Requirements:*	BIOL 1610+1611	Cell and Molecular Biology + Lab	4+1	WS	
	BIOL 1620+1621	Evolution and Ecology + Lab	4+1	FW	
	BIOL 1630+1631	Physiology and Development + Lab	4+1	SF	
	BIOL 2600	Ecology	5	FS	
	BIOL 2700	Genetics	5	FWS	
	BIOL 2750+51/3150/ 4700/	Biotechnology+Lab, Virology,	5-6	FS//F	
	4750+51 (Cell/Molecular)	Molecular Genetics, or Cell Biology+Lab		//W//FW	
	BIOL 2350/2520/3500/3650	Invertebrate Zoology & Biodiversity Sciences,	5	F//S	
	(Field Biology/ Biodiversity)	Plant Systematics, Evolution, or Marine Biology		//W//S	
	BIOL 3250/3300/3850/3880	Vertebrate Anatomy, Developmental Biology,	5	W//S	
	(Organismal Bio/Physiology)	Plant Physiology, or Animal Physiology		//W//F	
	BIOL Electives**	= choose from BIOL 2210 and above	15		
	BIOL 4991	Senior Synthesis I	2	F	
	BIOL 4992	Senior Synthesis II	2	W	
_	BIOL 4993+4996	Senior Synthesis III + Seminar	1+1	S	

## ••• Biology requirements:

III. Other Major		CHEM 1500+1501	General Chemistry I + Lab I	4+1	FW	
Requirements:*		CHEM 1510+1511	General Chemistry II + Lab II	4+2	WS	
		CHEM 1520 or 1590	General Chemistry III or Research-Focused GC III	4-5	SF//S	
	(	CHEM 2500+2501	Organic Chem I: Structure and Reactivity + Lab	4+2	FW	
	(	CHEM 2510+2511	Organic Chem II: Functional Group Interconv + Lab	4+2	WS	
Math/	a:	MATH 1334	Calculus I	5	FWS	
		MATH 1335	Calculus II	5	FWS	
Stats	b:	MATH 1210	Statistics for Life Sciences	5	FWS	
(pick a or b)		MATH 1230	Calculus for Life Sciences	5	FS	
Physics (pick a or b)	a:	PHYS 1050+1051	Mechanics	4+1	F	
		PHYS 1060+1061	Waves, Sound, Electricity, and Magnetism	4+1	W	
		PHYS 1070+1071	Thermodynamics, Optics, and Modern Physics	4+1	S	
	b:	PHYS 1210+1211	Mechanics	4+1	WS	

••• Other science requirements:

PHYS 1220+1221

PHYS 1230+1231

••• Total Major Curriculum Requirement credits required for graduation:

52

114

4+1

4+1

SF

FW

62\*

**Electricity and Magnetism** 

Waves and Optics

<sup>\*</sup>Notes: 62 BIOL credits are required, including 25 credits of >3000-level courses and one plant course (BIOL 2520, 2530, or 3850).

In prerequisite courses, grades of at least C are required in biology courses and at least a C- are required in other sciences.

Consult professional schools for prerequisite courses for programs: some schools may not accept Advanced Placement credit; or may require ≥1 quarter of Biochemistry, Calculus, or Microbiology or 0 to 3 quarters of Organic Chemistry.

<sup>\*\*</sup>Suggested Biology Electives include: BIOL 2210. 3100, 3150, 3180, 3250, 3300, 3820, 3880, 4100, 4150, 4700, 4750+4751.