

UW Bothell — B.S. in Biology Degree Checklist

Requirement	Done? ✓	Course Number	Course Title / Notes	Cr.
Foundational Math and Science Requirements				
Gen. Chemistry Series		BCHEM 143+144, 153+154, 163+164	Gen. Chemistry I, II, III + Labs	18
Intro Biology Series		BBIO 180, 200, 220	Intro Biology I, II, III	15
Calculus <i>Choose one course.</i>		STMATH 124	Calculus I	5
		BMATH 144	Calculus for Life and Social Sciences	
Physics Series <i>Choose one series.</i>		BPHYS 114+117, 115+118	Gen. Physics I, II + Labs; 3rd course optional	10
		BPHYS 121, 122	Calc-based Phys. I, II; 3rd course optional	
Statistics <i>Choose one course.</i>		BHLTH/BMATH 215	Statistics for Health Sciences	5
		BIS 215	Understanding Statistics	
		STMATH 341	Statistical Inference; calculus-based	

Biology Core Requirements				
Genetics		BBIO 360	Genetics	5
Evolution		BBIO 466	Evolution	5
Ecology <i>Choose one course.</i>		BES 312	Ecology	5
		BBIO 471 - Plant Ecology	**Alt option - see Aquatic Ecology below	
Cell Biology <i>Choose one course.</i>		BBIO 370	Microbiology I	5
		BBIO 372	Stem Cells	
		BBIO 380	Cell Biology; spring quarter fulfills Writing	
Physiology <i>Choose one course.</i>		BBIO 351	Anatomy & Physiology I	5
		BBIO 352	Anatomy & Physiology II; 351 not prereq	
Investigative Biology <i>Choose one option.</i>		BBIO 495	Investigative Biology; automatically counts	5
		BBIO 499	Undergrad Research; must petition and present	or
		Non-credit research (internships, etc.); must petition and present.		0

Electives / General Education Requirements				
Biology & Society		One course (usually 5 credits; as low as 3 credits). Review list of options.		5
Upper Division Biology Electives		20 credits (about 4 courses). Must be from at least two out of three categories: A (Ecology/Evolution), B (Cell/Molec), C (Physio/Neuro)		20
General Education & Areas of Knowledge Requirements <i>Can overlap with other requirements!</i>		Diversity (DIV); almost always also counts as A&H or SSc		5
		Composition; cannot overlap with any other requirements		5
		Additional Writing (C or W)		10
		Arts & Humanities (A&H); cannot overlap w/ SSc		15
Other Graduation Requirements		At least 180 total credits? Includes transfer credits.		
		At least 45 of last 60 required credits taken at UW Bothell?		

Quarters Offered (tentative)

	AUT	WIN	SPR	SUM
I		I, II	II, III	III
I, III		I, II	II, III	varies
I		I, II	II, III	III
I		I, II	II, III	III
✓	✓	✓	✓	✓
✓	✓	✓	✓	—
✓	✓	✓	✓	✓
✓	✓	✓	✓	✓
✓	✓	✓	✓	—

✓	✓	✓	varies
✓	✓	✓	—
✓	✓	✓	—
Not offered in 2023-2024			
✓	—	✓	—
Not offered in 2023-2024			
✓	—	✓	—
✓	✓	—	varies
—	✓	✓	—
✓	✓	✓	✓
Arrange w/ instructor.			
Arrange w/ organization.			

How to find options

Read next page or uwb.edu/biological-sciences/curricula
Use the search tool on MyPlan to look up these abbreviations: DIV, C, W, A&H, or SSc myplan.uw.edu/course
Check your degree audit! myplan.uw.edu/audit

Consider a minor!

Minors are **optional** sets of coursework you can take in addition to your major. These are common minors that Biology students take, but they are not the only ones!

Use the degree audit to explore additional minors and talk to your advisor to declare a minor.

Updated: 7/5/2023
Contact: sciadv@uw.edu

Chemistry Minor	
<i>All three of the following:</i>	
Organic Chem I - BCHEM 237	
OChem II+Lab - BCHEM 238+241	
At least one more chemistry lab course . Can fulfill with a course below marked with *.	
<i>Five electives from at least three of the following areas (18+ cr.):</i>	
Analytical Chemistry BCHEM *315, 350, *426	
Biochemistry BCHEM 310, 364, 365, *366, 375, 494	
Chemistry Education BCHEM 497	
Inorganic Chemistry BCHEM 312, 313	
Physical Chemistry BCHEM 401, 402, *404	

Neuroscience Minor	
<i>All three of the following:</i>	
Behavioral Neurosci - BBIO 320	
Anat & Phys I + Lab - BBIO 351	
Neurobiology - BBIO 480	
<i>Two electives from the following:</i>	
Beh. Endocrinology - BBIO 355	
** BBIO393 SPR24: Neurodevelopment	
Diseases Nerv. Syst. - BBIO 390	
Spec. Topics Neuro - BBIO 394	
Abnormal Psych. - BIS 270	
Clinical Psych. - BIS 422	
Important notes:	
[1] BBIO 310 no longer counts for the Neuroscience minor.	
[2] BBIO 480 & BBIO 320 cannot also count for the Biology major.	
[3] Other "BBIO" courses can count for the Biology major, but the "BIS" courses cannot .	

Health Studies Minor	
<i>Both of the following:</i>	
Intro Public Health - BHS 201	
Social Dimensions - BHS 302	
<i>One of the following:</i>	
Health Research - BHS 300	
Social Research - BIS 312	
Sci. Methods & Pract - BES 301	
One elective from list at:	
uwb.edu/healthstudies/degree-req/hs-electives	
Ecological Restoration Minor	
<i>All four of the following:</i>	
Restoration Ecology - BES 362	
Restoration Ecology Capstone (10 credits). Contact iasadv@uw.edu for courses.	
Two electives from list at:	
uwb.edu/ias/undergraduate/minors/ecological-restoration	

UW Bothell — B.S. in Biology Elective Options

Updated: 10/26/2023

Contact: sciadv@uw.edu

The Biology Major has **TWO** separate elective requirements:

[1] One "Biology & Society" course. This course can often fulfill Social Science (SSc) or other General Education credit.

[2] 20 credits (usually 4 courses) of "Biology Elective" coursework, taken from at least **two out of three categories** (A, B, or C).

Requirement overlap: One course cannot fulfill more than one requirement for your major (except General Education reqs).

Substitutions: To use a course not on the list of approved courses below, submit a petition at uw.edu/biological-sciences/forms

2023-2024 schedule is TENTATIVE: Actual offerings **will vary** depending on multiple factors, **especially summer** (not listed here).

Cat.	✓	Course #	Course Title / Notes	Cr.	Gen Ed	B&S	A	B	C	AUT	WIN	SPR
Biology & Society Only (Never "Biology Electives")		BBIO 231	Genes, Genomes, and Heredity	5	SSc	✓	—	—	—	—	✓	—
		BBIO 233	Cancer: Biology, Risk, and Treatment	5	—	✓	—	—	—	✓	—	—
	*	BBIO 293	SPECIAL TOPICS: History and Philosophy of Science			✓						✓
		BIS 241	Nature in the Northwest	5	—	✓	—	—	—	—	—	—
		BIS 243	Intro to Environmental Issues	5	SSc	✓	—	—	—	—	—	—
		BIS 307	Environmental Justice	5	SSc	✓	—	—	—	—	—	—
		BIS 356	Ethics and the Environment	5	SSc	✓	—	—	—	—	—	—
		BIS 380	Bioethics	5	SSc	✓	—	—	—	—	—	—
		BIS 391	Environmental History of PNW Bioregion	5	SSc	✓	—	—	—	—	—	—
		BIS 405	Environmental Education	5	—	✓	—	—	—	—	—	—
		BIS 408	Critical Physical Geography		DIV	✓	—	—	—	—	—	—
		BIS 459	Conservation and Sustainable Development	5	SSc	✓	—	—	—	—	—	—
		BISSTS 307	Science, Technology, and Society	5	SSc	✓	—	—	—	—	—	—
Category A (Ecology/Evolution/Diversity)		BBIO 330	Marine Biology	5	—	—	✓	—	—	—	—	Not in 2023-2024
		BBIO 335	Salmon and Society	5	SSc	✓	✓	—	—	—	—	Not in 2023-2024
	**	BBIO 393	SPECIAL TOPICS: Aquatic Ecology Section	5	—	—	✓	—	—	—	—	✓
		BES 312	Ecology	5	—	—	✓	—	—	—	—	—
		BES 316	Ecological Methods	5	—	—	✓	—	—	—	—	—
		BES 330	Limnology (the study of lakes)	5	—	—	✓	—	—	—	—	—
		BES 362	Intro to Restoration Ecology	5	SSc	—	✓	—	—	—	—	—
		BES 485	Conservation Biology	5	—	✓	✓	—	—	—	—	—
		BIS 306	Marine Diversity and Conservation	5	SSc	—	✓	—	—	—	—	—
	BIS 342	Geographic Information Systems	5	SSc	—	✓	—	—	—	—	—	
Category B (Cellular/Molecular)		BBIO 340	Computational Biology / Intro to Bioinformatics	5	—	—	—	✓	—	—	—	—
		BBIO 364	Biochemistry I	5	—	—	—	✓	—	—	—	—
		BBIO 365	Biochemistry II	5	—	—	—	✓	—	—	—	—
		BBIO 366	Biochemistry Lab	3	—	—	—	✓	—	—	—	—
		BBIO 372	Stem Cells	5	—	—	—	✓	—	—	—	Not in 2023-2024
		BBIO 375	Molecular Biology	5	—	—	—	✓	—	—	—	—
		BBIO 380	Cell Biology; spring quarters & AUT23 fulfills Writing	5	—	—	—	✓	—	—	W	—
		BBIO 460	Developmental Biology	5	—	—	—	✓	—	—	—	—
Category C (Physio / Neuro)		BBIO 310	Brain and Behavior; can't use for Neuro minor	5	—	✓	—	—	—	✓	—	—
		BBIO 320	Behavioral Neuro; not Bio Elective if in Neuro minor	5	—	—	—	—	—	✓	—	—
		BBIO 351	Anatomy and Physiology I	5	—	—	—	—	—	✓	—	—
		BBIO 352	Anatomy and Physiology 2	5	—	—	—	—	—	✓	—	—
		BBIO 355	Behavioral Endocrinology	5	—	—	—	—	—	✓	—	—
		BBIO 390	Diseases & Disorders of the Nervous System	5	—	—	—	—	—	✓	—	—
		BBIO 394	Special Topics in Neuroscience	5	—	—	—	—	—	✓	—	—
		BBIO 480	Neurobiology; not Bio Elective if in Neuro minor	5	—	—	—	—	—	✓	—	—
	**	BBIO 393	SPECIAL TOPICS: Neurodevelopment Section	5	—	—	—	—	—	✓	—	—
Multiple Categories		BBIO 370	Microbiology I + Lab	5	—	—	✓	✓	—	—	—	—
		BBIO 383	Bioinformatics	5	—	—	✓	✓	—	—	—	Not in 2023-2024
		BBIO 470	Microbiology II; fulfills Writing	5	—	—	✓	✓	—	—	W	—
		BBIO 385	Animal Behavior	5	—	—	✓	—	✓	—	—	—
Misc / Varies		BBIO 285	Seminar in Biology									
	*	BBIO 293	Special Topics in Biology; lower level									
	**	BBIO 393	Special Topics in Biology; upper level									
		BBIO 495	Investigative Biology									
		BBIO 430	Study Abroad: Advanced Biology									
		BBIO 498	Independent Study in Biology									
	BBIO 499	Undergraduate Research in Biology										
				<p>Elective category and number of credits for these courses can vary. Check with your academic advisor for help ensuring these will fulfill your degree requirements.</p>								
										<p>Check when schedule is posted: myplan.uw.edu/course Arrange 430/498/499 with instructor.</p>		

Contact **School of Interdisciplinary Arts & Sciences** at iasadv@uw.edu for assistance with BES, BIS, or BISSTS offerings.

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