

## Bachelor of Science - Biology

### OSU Graduation Requirements:

Students pursuing a degree at OSU must meet the following requirements in addition to program and college requirements.

- 180—total number of credits required to graduate from OSU
- 60—number of upper division credits required (300-400 level courses)
- Maintain a 2.0 or better university GPA
- Max 18 course withdraws (W grade)
- Max 11 credits PAC

BACCALAUREATE CORE Requirements-		
<ul style="list-style-type: none"> <li>▪ Search Bacc Core classes in the Schedule of Classes.</li> <li>▪ Transfer students who have an AAOT have all Skills and Perspectives completed.</li> <li>▪ Students with AAOT still need to complete Synthesis for Bacc Core.</li> </ul>		
Skills		Grade
Lifetime Fitness (2cr)	HHS 231 (2cr)	
Lifetime Fitness PAC (1cr)	Physical Activity Course (PAC)	
Mathematics (3-4cr)	Fulfilled by major; must complete in 1st 45 OSU credits	
Writing I (4cr)	WR 121z	
Writing II (4cr)	Fulfilled by major; must complete 1st 90 credits (45 if transfer)	
Speech (4cr)	Fulfilled by major; must complete 1st 45 credits (45 if transfer)	
Perspectives: No more than two courses from the same department may be used to satisfy the Perspectives Categories.		
Cultural Diversity (3-4cr)		
Literature & Arts (3-4cr)		
Soc. Processes & Institutions	PSY for pre-health professions	
Western Culture (3-4cr)		
Physical Science (4cr)	Fulfilled by Major (CH 2XX sequence)	
Biological Science (4cr)	Fulfilled by Major (BI 2XX sequence)	
Additional Phys or Bio Science (4cr)	Fulfilled by Major (CH 2XX & BI 2XX sequence)	
Difference, Power, & Discrimination (3-4cr)	Some major courses are also DPD courses	
Synthesis: Must be upper division and no more than two courses from the same department may be used.		
Contemporary Global Issues (3-4cr)	Some major courses are also CGI courses	
Science, Tech & Society (3-4cr)	Some major courses are also STS courses	

### BIOLOGY MAJOR Rules:

- **GPA requirement:** The Biology major requires a 2.0 cumulative OSU **and** major GPA to graduate. C- requirement for Biology (BI 2XX), Math (MTH) and Chemistry (CH).
- **S/U and withdraw (W):** Biology students cannot S/U major courses and are only allowed 18 course withdraws
- **Class Retakes:** OSU academic regulations often result in retakes not working the way students expect in terms of their GPA and requirements. If you are considering repeating a course you first completed at OSU or another school or you are repeating any OSU course for the third time, you should bring this to the attention of your advisor and reference [Academic Regulation 20](#).
- **Major courses are listed in order of priority.** Students planning to finish in four years should average 15 credits a term.

### Biology Major Requirements

Biology Core Courses	Pre(Co)Requisites	Notes	Grade
BI 198-Biology Seminar (1) or BI 197: Prof. Dev. Health Professions (1)		Required first year at OSU; take BI 197 if pre-health	
COMM 111z – Public Speaking (4)		Must complete 1st 45 credits	
WR 227z – Technical Writing (4)	WR 121z (C-)	Must complete 1st 90 credits	
MTH 251 – Calculus I(4)	MTH 112z (C-)		
MTH 252 – Calculus II(4)	MTH 251 (C-)		
ST 351 Intro to Statistical Methods (4)		MTH 111z recommended	
ST 352 Intro to Statistical Methods (4)	ST 351		
CH 231 & 261 General Chem. & Lab (4+1)	MTH Placement		
CH 232 & 262 General Chem. & Lab (5)	CH 231/261 (C-)		
CH 233 & 263 General Chem. & Lab (5)	CH 232/262 (C-)		
BI 221 Principles of Biology: Cells (5)	CH 231/261	May be taken concurrently	
BI 222 Principles of Biology: Organisms (4)	BI 221 (C-)		
BI 223 Principles of Biology: Populations (4)	BI 221 (C-)		
CH 331 Organic Chemistry (4)	CH 233/263 (C-)		
CH 332 Organic Chemistry (4)	CH 331 (C-)		
CH 337 Organic Chemistry Lab (4)	CH 332		
BB 450 General Biochemistry (4)	CH 332	BB 314 recommended	
BB 451 General Biochemistry (3)	BB 450		
BB 314 Cell and Molecular Biology (4)	BI 221, 222, 223 (C-); CH 331	Typically offered in winter	
BI 311 Genetics (4)	BI 221, 222, 223 (C-)	Typically offered in fall	
BI 370 Ecology (3)	BI 221, 222, 223 (C-)	Typically offered in winter	
BI 445 Evolution (3)	BI 311	Typically offered in spring	
MB 302 Gen. Microbiology & 303 Lab (5)	CH 332; BI 221 and 222 (C-)	BB 314 recommended	
<b>Physics or Computational and Quantitative Applications (select a Track)</b>			
TRACK I: PH 201, 202 & 203 General Physics (15)	MTH 112z or higher		
TRACK II: BDS 211 Use, Abuse of Data (3) BB 345 Python for MB (3) BB 485 Applied Bioinformatics (4) GEOG 360 Geog. Info Systems (3)	MTH 251, 241 or 245  BI 221 and BB 345	May be taken concurrently	
<b>Biology and Society (Select one from the following)</b>			
BB 332 Molecular Medicine (3)	Any biology course recommended	Also fulfills Bacc Core STS; typically offered in fall	
MB 330 Disease and Society (3)		Also fulfills Bacc Core DPD; typically offered in winter	
AEC 352: Environmental Econ & Policy	ECON 201	Also fulfills BACC Core CGI; typically offered in winter	
FW 350: Endangered Species, Society and Sustainability	FW 251 recommended	Also fulfills Bacc Core STS; typically offered in winter	
Z 349 Biodiversity (3)		Also fulfills Bacc Core CGI; typically offered in spring	

<b>Organismal Biology (Select one from the following)</b>			
Z 477 Aquatic Entomology (4)	BI 22X (C-), junior standing	Typically offered in fall	
Z371 Vertebrate Bio. & Z 372 Lab (3+2)	BI 221, 222, 223 (C-)	Offered in spring; cannot double-count for track req.	
<b>Physiology (Select one from the following)</b>			
Z 423 Environmental Physiology (3)	BI 22X (C-); CH 233/263 (C-)	Typically offered in fall	
<b>Writing Intensive Course (WIC) (select one of the following or see option)</b>			
BI 319 Critical Thinking & Comm. (3)	BI 221, 222, 223 (C-), ST 351	Offered Spring 2024	
BI 371 Ecological Methods (3)	BI 370	Not offered Spring 2024	
MB 385 Emerging Infectious Diseases and Epidemics (3)	BI 221, 222, 223	Offered Spring 2024	
<b>Experiential Learning or Integrative Biology Elective (Complete one of the two tracks below)</b>			
<b>Track I: Experiential Learning</b>			
BI 410: Internship (3), BI 401: Research (3), or BI 309 (3) Teaching Practicum	Dept approval required		
<b>Track II: Integrative Biology Course (select one course)</b>			
Z 371 Vertebrate Bio. AND Z 372 Lab (3+2)	BI 211, 212, 213 (C-)	Cannot double count in major; offered Spring 2024	
BB 315 Molecular Bio Lab (3)	Pre or co-req BB 314	Offered Winter 2024	
BI 375 Field Methods Eco. Restoration (4)		Requires instructor approval; offered Summer 2024	
<b>BI 498 Senior Biology Major Field Test –)</b>			
BI 498 (0 credits)	Register your last term; you will need to complete Canvas module.		

*\*Disclaimer: Information is for OSU-Cascades only and is subject to change with curriculum changes. Catalog year refers to the year students are admitted to OSU and declare the Biology Major.*