OSU BIOLOGY MAJOR ADVISING GUIDE 2022-23

(for use with MyDegrees)



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ADVISING INFORMATION:

Advisor and Advising Appointments:

Your advisor is based on your major combined with your option or professional goals. <u>You can view your advisor and make</u> <u>appointments here</u>. Students can meet for advising at any time, but use this table to determine when you **must** meet for advising:

Who	Must Meet
First year student, those using military	Each term
benefits, athletes, honors college	
Sophomores	Winter term
Juniors	Winter term
Transfer students	First term after transfer
Seniors	As needed to review for graduation

Other Contacts:

- Department of Integrative Biology (IB) (where advisors are located): Integrative Biology office, 4th Floor Snell, 541-737-2993, <u>ib@oregonstate.edu</u>
- Integrative Biology Club (IBC): All biology students are automatically members. Contact integrativebiologyclub@oregonstate.edu or see Facebook for upcoming events.
- Science Success Center, Kidder Hall 109, 541-737-3854, is open for registration and other help. Email sciencesuccess@oregonstate.edu to make a remote appointment.

Important Student Resources:

- My Degrees, available in your student online services, is used with this advising guide to plan your degree.
 - **My Degrees Checklist** lets you view your completed courses and remaining requirements for all declared programs (major, option, minor). View the <u>My Degrees Checklist tutorial</u> for details.
 - **My Degrees Planner** stores degree plans you share with your advisor. View the <u>Planner tutorial</u> for details.
 - Integrative Biology (IB) Website: Student clubs, study abroad, internship, research and other engagement opportunities.
- Integrative Biology (IB) Listserv: Current students are auto-subscribed and receive departmental posts in their OSU email.

POLICIES & GUIDELINES:

- **GPA:** The Biology major requires a 2.0 cumulative OSU and major GPA to graduate. The Pre-Medicine, Pre-Dentistry and Pre-Veterinary Medicine options require a 3.0 major GPA. Major GPA includes coursework in any declared options
- C- for Biology (BI), Math (MTH), and Chemistry (CH): All students must receive a C- or better in BI 221, 222 and 223; the CH 23x/26x series; and CH 331 and 332 to continue to courses that have these as prerequisites. Also, all math courses require a C- or higher in the previous math course in order to progress to the next one.
- **Double counting courses:** Courses from other majors, minors and Baccalaureate Core (Bacc. Core) courses may be counted for major requirements unless the other program restricts sharing. No courses may be shared within the major or within the Bacc. Core even though some are listed in multiple areas. Option requirements clear categories of the major as noted in the options and tracked in MyDegrees.
- S/U and withdraw (W): Biology students cannot S/U major courses. All OSU students are only allowed 18 withdraws.
- **Restricted double or dual majors**: No combination of Biology, Biochemistry and Biophysics, Biochemistry and Molecular Biology, Biohealth Sciences, Microbiology, or Zoology majors is allowed.
- Biology Options and Minors: Options are concentrations of coursework that are optional, transcript-visible, and may alter the plans below. They include Ecology, Genetics, Marine Biology, Physiology and Behavior, Pre-Dentistry, Pre-Education, Pre-Medicine (which has pathways for Physician, Physician Assistant, Pharmacy, Optometry, and others) and Pre-Veterinary Medicine (see option planners here). Many excellent professional goals do not have official options, and a variety of OSU minors may also be beneficial in pursuing these.
- **Chemistry Minor:** A Chemistry Minor can be completed with one additional course (generally CH 324 Quantitative Analysis, CH 390 Environmental Chemistry). Contact your advisor for approval. CH 324 is major restricted until phase II registration, and students should contact the Chemistry Department or consult the <u>OSU Schedule of Classes</u> for the timing of offerings.
- Class Retakes: OSU academic regulations often result in retakes not working how students expect. Tell your advisor if you
 are considering retaking a course you first completed at OSU or another school, or if you are repeating an OSU course for
 the third time. <u>Students should also review the retake information here</u>.
- **Ecampus course access:** The Biology major is not offered via Ecampus. Though some major courses are available via Ecampus, they may have restricted access and be unavailable to Corvallis students.

BACCALAUREATE CORE REQUIREMENTS:

The Baccalaureate Core (Bacc Core) Curriculum promotes understanding of interrelationships among disciplines in order to increase students' capacities as ethical world citizens. Writing I, Math, and Communications must be completed in the first 45 credits. Some of the courses overlap major requirements and count for both the major and Baccalaureate Core (see notes below).

Skills:

These courses build a foundation for success in other courses.

- Fitness: HHS 231 lecture & [HHS 241 or Physical Activity Course (PAC) course]
- Math (1st year): <u>Major requires calculus courses</u>. A C- or better is required in math course prerequisites. Once math is started based on placement, continue this sequence each term until completed MTH 065 → 103 → 111Z → 112Z → either [MTH 227 & 228] or [MTH 251 & 252]
- Writing I (1st year WR 121Z). Registration is by last name with A-G Fall, H-N Winter, O-Z Spring.
- Writing II (2nd year): Major requires WR 227Z (formerly WR 327) or 362. Must complete in first 90 credits (45 if transfer).
- Speech (1st year): <u>Major requires COMM 111Z</u>.

Perspectives:

These build a broader understanding of our multifaceted world. No more than two courses from any one department may be used to satisfy the perspectives requirements. Each listing represents a category with many course choices.

- Biological Science, Physical Science: Major requires BI 221, 222, 223 and CH 231/261, 232/262, 233/263.
- Cultural Diversity (see list)
- Literature and the Arts (see list)
- Social Processes and Institutions (see list) (Psychology for those interested in health and wellness career space)
- Western Culture (see list)

Difference, Power and Discrimination:

These address intersections of human identity and experience with institutionalized systems of inequity and privilege in the US.

Synthesis Courses:

These facilitate synthesis of information and experience. As such, they are completed after the other categories above. Courses used to fulfill the synthesis requirements may not be from the same department.

- Contemporary Global Issues (CGI): Taken junior/senior year, some count toward major or option requirements
- Science, Technology, and Society (STS): Taken junior/senior year, some count toward major or options requirements

BIOLOGY FOUR YEAR PLANS:

These tracks outline ways to complete the degree within four years, averaging 15 credits a term. Tracks are determined by where students start in math (ALEKS placement or transfer credits). The math sequences for OSU Biology students is MTH 065 \rightarrow 103 \rightarrow 111Z \rightarrow 112Z \rightarrow either [MTH 227 & 228] or [MTH 251 & 252]. Courses are listed in order of priority based on prerequisites. Students taking fewer credits should focus on completing courses in earlier years before progressing toward the next year.

Math Placement	Track 1: Placed in MTH 103, 111Z, or 112Z	Track 2: MTH 227 or 251 placement or credit		
Year 1	 Start MTH (MTH 103, 111Z or 112Z) courses in Fall, continue each term BI 197 or 198 Fall, BI 298 Spring CH 231/261, 232/262, 233/263 Two or more Bacc. Core courses a term: Prioritize. COMM 111Z and WR 121Z 	 Start MTH (227 or 251) courses in Winter, continue each term BI 197 or 198 Fall, BI 298 Spring CH 231/261, 232/262, 233/263 BI 221, 222, 223 One Bacc. Core course a term: Prioritize COMM 111Z and WR 121Z 		
Math Remaining	Track 1: Two or more math courses remaining	Track 2A: Two or more math courses remaining	Track 2B. One or no math courses remaining	
Year 2	 BI 221, 222, 223 CH 331, 332, 337 One Bacc. Core course a term: WR 227Z or 362 a priority Finish MTH courses then ST 351, 352 	 CH 331, 332, 337 One Bacc. Core course a term: WR 227Z or 362 a priority Fill in one BI course a quarter from: BI 370, BI 311, BB 314 Finish MTH then ST 351, 352 	 CH 331, 332, 337 PH or computational track courses One Bacc. Core course a term: WR 227Z or 362 a priority Finish MTH then one BI course a quarter: BI 370, BI 311, BB 314 	
Year 3	 ST 351, 352 if not completed PH or computational track courses Writing Intensive Course Fill in 1 major course a quarter from: BI 370, 311, BB 314, BI 445 BB 450, 451 One Bacc. Core course a term until finished 	 PH or computational track courses BB 450, 451 Writing Intensive Course One Bacc. Core a term until finished BI course(s) not taken 2nd year, then major courses: BI 445, Organismal Biology, Biology & Society, Physiology, and MB 302 & 303 	 BB 450, 451 ST 351, 352 Writing Intensive Course One Bacc. Core a term until finished BI course(s) not taken 2nd year, then major courses: BI 445, Organismal Biology, Biology & Society, Physiology, and MB 302&303 	
Year 4	 Major courses above not yet completed Fill in with major courses below: Organismal Bio, Bio & Society, Physiology, MB302 & 303 Experiential Learning, Integrative Biology Course, or complete option Complete 180 credits, 60 upper division BI 498 Major Field Test: take in final OSU term 	 Major courses above not yet completed Experiential Learning, Integrative Biology Course, or complete option Complete 180 credits, 60 upper division BI 498 Major Field Test: take in final OSU term 	 Major courses above not yet completed Experiential Learning, Integrative Biology Course, or complete option Complete 180 credits, 60 upper division BI 498 Major Field Test: take in final OSU term 	

BIOLOGY MAJOR REQUIREMENTS:

Unless noted, these courses reflect Corvallis campus offerings. Check the Schedule of Classes for offering at other campuses.

Biology Core Courses:

Professional Development:

Take (either BI 197 or BI 198) and BI 298 in first year

Course	Description	Term(s)	Pre-/co-requisites	Comments
BI 197	Professional Develop: Health Profession (1)	F	-	Human health & wellness careers
or BI 198	Professional Develop: Biology & Zoology (1)	F	-	Other, non-human health careers and pre-vet
BI 298	Professional Development for Biologists II (1)	SP	-	Required in 1 st year

Math & Statistics:

Take either Calculus and Probability for Life Sci. (MTH 227 & MTH 228) -or- Calculus (MTH 251 & MTH 252)

Course	Description	Term(s)	Pre-/co-requisites	Comments
MTH 227	Calculus and Probability for Life Sci. I (4)	W, SP	MTH 112Z (C-)	Complete MTH 227 & 228 as series
& MTH 228	Calculus and Probability for Life Sci. 2 (4	F, SP	MTH 227 (C-)	Complete MTH 227 & 228 as series
MTH 251	Calculus (4)	All	MTH 112 (C-)	Complete MTH 251 & 252 as series
& MTH 252	Calculus (4)	All	MTH 251 (C-)	Complete MTH 251 & 252 as series

Take ST 351. Then take either Intro to Statistical Methods II (ST 352) -or- Methods of Data Analysis (ST 411 & 412)

Course	Description	Term(s)	Pre-/co-requisites	Comments
ST 351	Introduction to Statistical Methods (4)	All	MTH 111Z	-
& ST 352 <u>or</u>	Introduction to Statistical Methods II (4)	All	ST 351	-
ST 411	Methods of Data Analysis (4)	All	ST 351	Genetics option requires ST 41x
& ST 412	Methods of Data Analysis (4)	All	ST 411	Genetics option requires ST 41x

General Chemistry:

Course	Description	Term(s)	Pre-/co-requisites	Comments
CH321 8 361	General Chem. and Lab (4+1)	F, W, Su*	NATH 1117*	*May be taken concurrently; CH 231
CH251 & 201			MIH IIIZ*	is Ecampus only in summer
CH232 & 262	General Chem. and Lab (4+1)	W, Sp, Su*	CH 231/261 (C-)	* CH 231 is Ecampus only in summer
CH233 & 263	General Chem. and Lab (4+1)	F, Sp, Su*	CH 232/262 (C-)	* CH 231 is Ecampus only in summer

Principles of Biology:

Course	Description	Term(s)	Pre-/co-requisites	Comments
BI 221	Principles of Biology: Cells (4)	F, Su	CH 231/261*	*May be taken concurrently
BI 222	Principles of Biology: Organisms (4)	W, Su	BI 221 (C-); CH 231/261* (C-)	*May be taken concurrently
BI 223	Principles of Biology: Populations (4)	Sp, Su	BI 221 (C-); CH 231/261 (C-)	-

Organic Chemistry & Biochemistry:

Course	Description	Term(s)	Pre-/co-requisites	Comments
CH 331	Organic Chemistry (4)	F, W, Su	CH 233/263 (C-)	-
CH 332	Organic Chemistry (4)	W, Sp, Su	СН 331 (С-)	-
CH 337	Organic Chemistry Lab (4)	F, Sp, Su	СН 332 (С-)	-
BB 450	General Biochemistry (4)	F <i>,</i> W	CH 332; BB 314 recommended	-
BB 451	General Biochemistry (3)	W, Sp	BB 450	-

Upper Division Biology Core:

Course	Description	Term(s)	Pre-/co-requisites	Comments
BI 370	Ecology (3)	F, W, Sp	BI 221, 222, 223 (C-)	-
BI 311	Genetics (4)	F, W, Sp	BI 221, 222, 223 (C-)	-
BB 314	Cell and Molecular Biology (4)	All	BI 221, 222, 223 (C-); CH 233/263	-
MB 302/303	General Microbiology & Lab (3+2)	All	CH 332 & BI 221, 222, 223 (C-)	-
BI 445	Evolution (3)	F, W, Sp	BI 311	-

Biology Electives:

Declaring an option will alter these categories - see options for details.

Physics\Computer Science and Quantitative Applications:

Complete either Track I (Physics) or Track II (Computer Science and Quantitative Applications)

Track I: Physics - complete the physics series

Course	Description	Term(s)	Pre-/co-requisites	Comments
PH 201	General Physics (5)	F, Su	MTH 112Z or higher	-
PH 202	General Physics (5)	W, Su	MTH 112Z and PH 201	-
PH 203	General Physics (5)	Sp, Su	MTH 112Z and PH 202	-

Track II: Computer Science and Quantitative Applications - complete (BDS 211 and BB 345) -or- (BDS 310 and 311) and two electives

Course	Description	Term(s)	Pre-/co-requisites	Comments
BDS 211	Use & Abuse of Data: Critical Think. in Sci. (3)	Sp	MTH 251 (C-) or 227 (C-)	
<u>&</u> BB 345	Python for Molecular Biologist (3)	F		
<u>OR</u> BDS 310	Foundation of Biological Data Sciences (4)	F	MTH 251 (C-) or MTH 227 (C-)	
& BDS 311	Computational Approaches for Biol. Data (3)	W	BDS 310 (C-) or CS 161 (C-)	

Track II Electives: Complete two elective courses from the list below to complete track II

Course	Description	Term(s)	Pre-/co-requisites	Comments
BB 485	Applied Bioinformatics (3)	W	BI 221 (C-) & (BB 345, BDS 310, CS 161 or CS 201)	-
BDS/CS 446	Networks in Computation Biology (3)	?*	MTH 251 (C-)_	*See catalog
BDS 472	Advanced Computational Biological Data	Sp	BDS 311 (C-) or 162 (C-) & BI 221 (C-)	*See catalog
	Analysis (3)			
BDS 475	Comparative Genomics (4)	W	BB 314 (C-) & BI 311 (C-)	-
BDS 477	Population Genomics (3)	Sp	BDS 310 (C-)	
BDS 478	Functional Genomics (3)	W	BB 314 (C-)	-
BI 456	Phylogenetics (4)	W*	(ST 352 or 411) & BI 311	*Alternate even years
BI 481	Biogeography (3)	W*	BI 370	*Alternate odd years
BI 483	Population Biology (3)	W	(BI311 or 370 & MTH 227 or 252) & (ST352* or 411*)	*May be concurrent
FW 433	Population Dynamics for Conservation (4)	Sp?*	(FW 320 or BI 483) (C-) & (MTH 228 or 252) (C-)	*See catalog
GEOG 360	GIScience I: GIS Info. Systems & Theory (4)	F, W, Sp	MTH 112Z, ST 351	-
GEOG 361	Quant. Geospacial Analysis & Modeling (4)	W	GEOG 360 (C-), MTH 112Z(C-), ST 351(C-)	-
<u>or</u> 460	GIS & Spacial Data Science (4)	Sp	GEOG 360 (C-), MTH 112Z (C-), ST 351(C-)	-
OC 449	Ecol. Theories in Biol. and Fisheries	Sp*	(MTH 228 or 252) (C-), ST 351 (C-), BI 370 (C-)	*Alternate even years
	Oceanography Data (4)			
ST 415	Design and Analysis of Planned Experiments	Sp?*	ST 352 or ST 411	*See catalog
ST 431	Sampling Methods (3)	F	ST 411	

Biology and Society:

Take one of the following (or see option).

Note: all courses count within the Bacc. Core. Specifics on where in Comments column after "BC".

Course	Description	Term(s)	Pre-/co-requisites	Comments
AEC 351	Natural Resource Econ. & Policy (3)	W*	Sophomore +; AEC 250, AREC 250 or ECON 201	*See catalog; BC: Contemporary Global Issues
AEC/ECON 352	Environmental Econ. & Policy (3)	F, Sp*	Sophomore +; AEC 250 or ECON 201	*See catalog; BC: Contemporary Global Issues
BB 220	Cancer: Society's Malignant Shadow	·5*	-	*See catalog; BC: Difference, Power & Discrimination.
BB 331	Introduction to Molecular Biology (3)	·5*	Sophomore +; CH 232 & 262	*See catalog; BC: Science, Tech. & Society
BB 332	Molecular Medicine (3)	F	Sophomore +; BI 221	BC: Science, Tech. & Society
BI 175	Genomes, Identities and Society (3)	*Alternate winter terms	-	*See catalog; BC: Difference, Power & Discrimination
BI 301	Human Impacts on Ecosystems (3)	W	Sophomore +; BI 221, 222, 223 & CH 233/363	BC: Contemporary Global Issues
BI 306H	Environmental Ecology (3)	F*	BI 221, 222, 223 & CH 233/263	*See catalog; offered as Honors College only; BC: Contemp. Global Issues
BI 345	Introduction to Evolution (3)	Sp*	Sophomore +	*Ecampus only; BC: Science, Tech. & Society
BI 347	Oceans in Peril (3)	w	Sophomore +; BI 150 or 221	BC: Science, Tech. & Society
BI 348	Human Ecology (3)	Sp*	Sophomore +	*Ecampus only; BC: Science, Tech. & Society
BOT 324	Fungi in Society (3)	Sp	BI 221	BC: Science, Tech. & Society
FES/TOX 435	Genes, Chemicals in Agriculture (3)	Sp?*	Sophomore +	*See catalog; BC: Science, Tech. & Society
FW 350	Endangered Species, Society & Sustain. (3)	F*	Sophomore +	*See catalog; BC: Science, Tech. & Society
H 312	HIV/AIDS and STIS in Society (3)	All*	Sophomore +	*See catalog; BC: Contemporary Global Issues
HSTS 417	History of Medicine	All*	Sophomore +	*See catalog; BC: Science, Tech. & Society, Ecampus only
MB 330	Disease and Society (3)	?*		*See catalog; BC: Difference, Power & Discrimination
REL/PHL 444	Biomedical Ethics	F, W, Su*	Sophomore +	*See catalog; BC: Science, Tech. & Society
Z 349	Biodiversity: Causes & Conservation (3)	F, W	Sophomore +	BC: Contemporary Global Issues

Organismal Biology:

Take one of the following (or see option)

Course	Description	Term(s)	Pre-/co-requisites	Comments
BI 427	Paleobiology (4)	Sp	BI 221, 222, 223 (C-)	-
BOT 321	Plant Systematics (4)	Sp	BI 221, 222, 223 (C-)	-
BOT 416	Aquatic Botany (4)	F	BI 221, 222, 223 (C-)	-
BOT 461	Introduction to Mycology (4)	F	BI 221, 222, 223 (C-)	-
Z 361 & 362	Invertebrate Biology & Lab (3+2)	Sp	BI 221, 222, 223 (C-)	Z 361 and 362 are taken together
Z 371 & 372	Vertebrate Biology & Lab (3+2)	F	BI 221, 222, 223 (C-)	Z 371 and 372 are taken together
Z 422	Comparative/Functional Vert. Anat. (5)	F	BI 221, 222, 223 (C-)	-
Z 461	Marine & Estuarine Invertebrates (4)	Su*	BI 221, 222, 223 (C-)	* Hatfield campus only
Z 477	Aquatic Entomology (4)	W*	BI 221, 222, 223 (C-), junior +	*Alternate odd years

Physiology:

Take one of the following (or see option)

Course	Description	Term(s)	Pre-/co-requisites	Comments
BI 331/341 &	Adv. Human Anat. & Phys. / Lab I & II	F, W	BI 221, 222, 223 (C-), CH 233/263 (C-),	Must complete both terms of lecture
BI 332/342	((3+2) & (3+2))		junior +	and lab
BOT 331	Plant Physiology (4)	W	BI 221, 222, 223 (C-), CH 233/ 263 (C-)	-
BOT 488	Environmental Physiology of Plants (3)	W	BI 370	-
Z 423	Environmental Physiology (3)	F	BI 221, 222, 223 (C-); CH 233/263 (C-)	-
Z 425	Embryology & Development (5)	F	BI 311 & BB 314, junior +	-
Z 431	Vertebrate Physiology (3)	W	BI 221, 222, 223 (C-) and CH 332* (C-)	*May be taken concurrently

Writing Intensive Course (WIC):

Take one of the following (or see option)

Course	Description	Term(s)	Pre-/co-requisites	Comments
BI 319	Critical Thinking & Comm. Life Sci. (3)	F, W, Sp	BI 221, 222, 223 (C-), ST 351	-
BI 371	Ecological Methods (3)	Sp	BI 370	-
BI 373	Field Methods in Marine Ecology (3)	Sp	BI 370 or BI 351	-
MB 385	Infectious Diseases & Epidemics (3)	W	BI 221, 222, 223	-

Experiential Learning or Integrative Biology Elective (if not completing an option):

Complete Track I (Experiential Learning), Track II (Integrative Biology Course)

Track 1: Experiential Learning – complete any combination of 3 credits of the following

Course	Description	Term	Pre-/co-requisites	Comments
BI 309	Teaching Practicum (1-3)	All	Department approval	See online forms here
BI 401	Research (1-3)	All	Department approval	See online forms here
BI 406	Projects: Curatorial Assistant (1-3)	All	Department approval	See online forms here
BI 409	Advanced Teach Practicum (1-3)	All	Department approval	See online forms here
BI 410	Internship (1-3)	All	Department approval	See online forms here

Track 2: Integrative Biology Course – select one course

Course	Description	Term	Pre-/co-requisites	Comments
BI 333 & 343	Adv. Human Anat. & Phys. / Lab (3+2)	Sp	BI 332 and 342 (C-)	-
BI 353	Pacific NW Coastal Ecosystems (4)	Su*	BI 221, 222, 223 (C-)	* Hatfield campus only
BI 358	Symbiosis and the Environment (3)	W*	BI 221, 222, 223 (C-), CH 233/263 (C-)	* See Catalog, alternate even years
BI 375	Field Methods in Ecol. Restoration (4)	Su*	BI 221, 222, 223 (C-)	*Cascades campus only
BI 427	Paleobiology (4)	Sp*	BI 221, 222, 223 (C-)	Cannot also be counted above
BI 450	Marine Biology (15)	Sp*	BI 370 & ST 351 (352 recommended)	*Hatfield campus only
BI 454	Evolutionary Genomics	Sp*	BI 311	*See Catalog, alternate odd years,
				cannot also be counted above
BI 456	Phylogenetics (4)	W*	ST 352; BI 311	*See Catalog, alternate even years,
				cannot also be counted above
BI 481	Biogeography (3)	W*	BI 370	*See Catalog, alternate odd years,
				cannot also be counted above
BI 483	Population Biology (3)	W	(BI311 or 370 & MTH 227 or 252) &	*May be taken concurrently, cannot
			(ST352* or 411*)	also be counted above
BI 485	Monster Biology (3)	W	BI 311* & BI 370*, junior +	*May be taken concurrently
BI 495	Disease Ecology (3)	W*	BI 370 (C-)	*See Catalog, alternate even years
Z 350	Animal Behavior (3)	W, Sp	BI 221, 222, 223 (C-)	-
Z 361 & 362	Invertebrate Biology & Lab (3+2)	Sp	BI 221, 222, 223 (C-)	Cannot also be counted above
Z 365	Biology of Insects (4)	Sp*	BI 221, 222, 223 (C-)	*Ecampus only
Z 371 & 372	Vertebrate Biology AND Z 372 Lab (3+2)	F	BI 211, 212, 213 (C-)	Cannot also be counted above
Z 423	Environmental Physiology	F	BI 221, 222, 223 (C-); CH 233/263 (C-)	Cannot also be counted above
Z 425	Embryology & Development (5)	F	BI 311 & BB 314, junior +	Cannot also be counted above
Z 438	Behavioral Neurobiology (3)	Sp	BI 221, 222, 223 (C-) & CH 233/263	-
Z 461	Marine & Estuarine Invert. Zoology (4)	Su*	BI 221, 222, 223 (C-);	*Hatfield campus only, cannot also
				be counted above
Z 473	Herpetology (4)	F*, Sp*	BI 221, 222, 223 (C-)	*Ecampus only

BI 498 Biology Major Field Test:

<u>BI 498 Biology Major Field Test</u>: Is offered all terms and must be completed in your final term.

Course	Description	Term(s)	Pre-/co-requisites	Comments
BI 498	Biology Major Field Test (0)	All	Required completion in your final term	-

GRADUATION REQUIREMENTS:

- 1. <u>BI 498 Biology Major Field Test</u>: Is offered fall, winter, spring, and summer terms. It must be completed in your final term.
- 2. Complete all major courses and 180 total credits and 60 upper division credits (300-400 level). Note that Biology major and Bacc Core courses alone do not total 180 credits.
- 3. No more than 11 PAC or 15 ALS credits can be used to reach 180 required
- 4. Maintain a 2.0 average GPA for your degree AND major (tracked in My Degrees). Pre-Dentistry, Pre-Medicine and Pre-Veterinary Medicine require a 3.0 major GPA.