

# CORVALLIS ZOOLOGY MAJOR ADVISING GUIDE 2022-23

for use with MyDegrees



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## ADVISING INFORMATION

### Advisor and Advising Appointments:

. [You can view your advisor and make appointments here.](#) 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 benefits, athletes, honors college	Each term
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, 3029 Cordley Hall, 541-737-2993, [ib@oregonstate.edu](mailto:ib@oregonstate.edu)
  - The Biosphere student lounge, 3019 Cordley Hall is open for all Biology and Zoology students.
- **Integrative Biology Club (IBC):** All biology students are automatically members. Contact [integrativebiologyclub@oregonstate.edu](mailto: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](mailto:sciencesuccess@oregonstate.edu) for 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, minor, etc.). View the [My Degrees Checklist tutorial](#) for details.
  - **My Degrees Planner** stores degree plans you share with your advisor. View the [Planner tutorial](#) 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 ONID email.

## POLICIES & GUIDELINES:

- **GPA:** The Zoology major requires a 2.0 cumulative OSU and major GPA to graduate.
- **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 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 a minor restricts sharing. No courses may be shared within the major or within Bacc. Core even though some are listed in multiple areas.
- **S/U and withdraw (W):** Zoology students cannot S/U major courses. All OSU students are only allowed 18 withdraws.
- **Restricted double or dual majors:** No combination of Biology, Biohealth Sciences, Fisheries and Wildlife Sciences, or Zoology majors is allowed.
- **Chemistry Minor:** A Chemistry Minor can be completed by taking one additional course (often CH 324 Quantitative Analysis or CH 390 Environmental Chemistry). Contact your advisor for approval. CH 324 is often restricted by major until phase II of registration.
- **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. [Students should also review the retake information here.](#)

## 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 (1<sup>st</sup> year):** Major requires calculus courses. 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 (1<sup>st</sup> year WR 121Z).** Registration is by last name with A-G Fall, H-N Winter, O-Z Spring.
- **Writing II (2<sup>nd</sup> year):** Major requires WR 227Z (formerly WR 327) or 362. Must complete in first 90 credits (45 if transfer).
- **Speech (1<sup>st</sup> year):** Major requires COMM 111Z.

### 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)**
- **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 requirements
- **Science, Technology, and Society (STS):** Taken junior/senior year, some count toward major requirements

## ZOOLOGY 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 Corvallis Zoology students is MTH 065 → 103 → 111Z → 112Z → 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
Year 1	<ul style="list-style-type: none"> <li>Start MTH (103, 111Z or 112Z) Fall, continue each term</li> <li>BI 198 Fall, BI 298 Spring</li> <li>CH 231 &amp; 261, 232 &amp; 262, 233 &amp; 263 (OR 121x)</li> <li>Two or more Bacc Core courses a term: Prioritize COMM 111Z and WR 121Z</li> </ul>	<ul style="list-style-type: none"> <li>Start MTH (227 or 251) in Winter, continue each term</li> <li>BI 198 Fall, BI 298 Spring</li> <li>BI 221, 222, 223</li> <li>CH 231&amp;261, 232&amp;262, 233&amp;263 (OR 121x)</li> <li>One Bacc Core course a term: Prioritize COMM 111Z and WR 121Z</li> </ul>
Year 2	<ul style="list-style-type: none"> <li>BI 221, 222, 223</li> <li>CH 331, 332</li> <li>One Bacc Core course a term: Prioritize WR 227Z or 362.</li> <li>Finish MTH courses then fill with Bacc Core</li> </ul>	<ul style="list-style-type: none"> <li>CH 331, 332</li> <li>Finish MTH then ST 351, 352</li> <li>One Bacc Core course a term: Prioritize WR 227Z or 362.</li> <li>One course a term from: BI 370, BI 311, BI 445, Z 423</li> </ul>
Year 3	<ul style="list-style-type: none"> <li>CH 337 or 390</li> <li>ST 351, 352</li> <li>Z 371, 372</li> <li>(Z 361 and 362) OR Z 461 (summer only)</li> <li>Writing Intensive Course</li> <li>One Bacc Core course a term until finished</li> <li>One course a term from: BI 370, BI 311, BI 445, Z 423</li> <li>Complete courses not taken above then fill with major electives</li> </ul>	<ul style="list-style-type: none"> <li>CH 337 or 390</li> <li>Z 371, 372</li> <li>(Z 361 and 362) OR Z 461 (summer only)</li> <li>Writing Intensive Course</li> <li>BB 314 and BI 483</li> <li>One Bacc Core course a term until finished</li> <li>Complete courses not taken above then fill with major electives</li> </ul>
Year 4	<ul style="list-style-type: none"> <li>BB 314 and BI 483</li> <li>Complete major course(s) not taken above</li> <li>Complete 180 credits, 60 upper division</li> <li>BI 498 Major Field Test: take in final OSU term</li> </ul>	<ul style="list-style-type: none"> <li>Complete major course(s) not taken above</li> <li>Complete 180 credits, 60 upper division</li> <li>BI 498 Major Field Test: take in final OSU term</li> </ul>

## ZOOLOGY MAJOR REQUIREMENTS:

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

### Zoology Core Courses:

#### Professional Development:

Course	Description	Term(s)	Pre-/co-requisites	Comments
BI 198	Professional Development: Biology and Zoology (1)	F	-	Required in 1 <sup>st</sup> year
BI 298	Professional Development for Biologists II (1)	SP	-	Required in 1 <sup>st</sup> 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 ST 352

Course	Description	Term(s)	Pre-/co-requisites	Comments
ST 351	Introduction to Statistical Methods (4)	All	MTH 111Z	-
ST 352	Introduction to Statistical Methods II (4)	All	ST 351	-

#### General Chemistry:

Course	Description	Term(s)	Pre-/co-requisites	Comments
CH 231 & 261	General Chem. and Lab (4+1)	F, W, Su*	MTH 111*	*May be taken concurrently; CH 231 is Ecampus only in summer
CH 232 & 262	General Chem. and Lab (4+1)	W, Sp, Su*	CH 231/261 (C-)	*CH 231 is Ecampus only in summer
CH 233 & 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 121 or CH 231/261*	*May be taken concurrently
BI 222	Principles of Biology: Organisms (4)	W, Su	BI 221 (C-); CH 121 or CH 231/261 (C-)	*May be taken concurrently
BI 223	Principles of Biology: Populations (4)	Sp, Su	BI 221 (C-); CH 121 or CH 231/261 (C-)	-

## Organic and/or Environmental Chemistry:

Take CH 331 & CH 332. Then, choose CH 337 or CH 390

Course	Description	Term(s)	Pre-/co-requisites	Comments
CH 331	Organic Chemistry (4)	F, W, Su	CH 233/263 or 123 (C-)	-
CH 332	Organic Chemistry (4)	W, Sp, Su	CH 331 (C-)	-
CH 337 <u>or</u>	Organic Chemistry Lab (4)	F, Sp, Su	CH 332 (C-)	-
CH 390	Environmental Chemistry (3)	W*, Sp*	CH 331 (C-)	*Ecampus only

## Upper Division Zoology Core:

Choose either (Z 361&362) or Z 461.

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 (C-)	-
Z 361 & 362 <u>or</u>	Invertebrate Biology & Lab (3 + 2)	Sp	BI 221, 222, 223 (C-)	Z 361 and 362 should be taken together in the same term
Z461	Marine & Estuarine Invertebrates (4)	Su*	BI 221, 222, 223 (C-)	*Hatfield campus only
Z 371 & 372	Vertebrate Biology & Lab (3)	F	BI 221, 222, 223 (C-)	Z 371 and 372 should be taken together in the same term
Z 423	Environmental Physiology	F	BI 221, 222, 223 (C-), CH 233/263 or 123	-
BI 445	Evolution (3)	F, W, Sp	BI 311	-
BI 483	Population Biology (3)	W	(BI 311 or BI 370), (MTH 227 or 251), ST 352*	*May be taken concurrently

## Writing Intensive Course (WIC):

Take one of the following.

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	-

## Zoology Electives:

### Organismal/Physiology/Systematics (OPS) electives:

Take two of the following.

Course	Description	Term(s)	Pre-/co-requisites	Comments
BI 358	Symbiosis & the Environment (3)	W*	BI 22X, CH 233/263 or 123 (C-)	*Alternate even years
BI 485	Monster Biology (3)	W	BI 311*, BI 370*, junior +	*May be taken concurrently
BOT 321	Plant Systematics (4)	Sp	BI 221, 222, 223 (C-)	-
FW 302 <u>or</u>	Biol. & Conserv. of Marine Mammals (4)	Su*	BI 221, 222, 223 (C-)	*Hatfield only
FW 311 <u>or</u>	Ornithology (3)	Sp	BI 221, 222, 223 (C-)	
FW 315 <u>or</u>	Ichthyology (3)	F	BI 221, 222, 223 (C-)	
FW 317 <u>or</u>	Mammology (3)	W	BI 221, 222, 223 (C-)	
FW 331	Ecology of Marine & Estuarine Birds (4)	Su*	BI 221, 222, 223 (C-)	* Hatfield only
MB 480	General Parasitology (3)	W	BI 221, 222, 223 (C-)	-
Z 350	Animal Behavior (3)	W, Sp	BI 221, 222, 223 (C-)	-
Z 365	Biology of Insects (4)	Sp*	BI 221, 222, 223 (C-)	*Ecampus only
Z 422	Comparative/Functional Vert. Anat. (5)	F	BI 221, 222, 223 (C-), CH 332*	*May be taken concurrently
Z 431	Vertebrate Physiology I (3)	W	BI 221, 222, 223 (C-), CH 332*	*May be taken concurrently
Z 438	Behavioral Neurobiology (3)	Sp	BI 22X (C-), CH 233/263 or 123 (C-)	-
Z 473	Herpetology (3)	F*, Sp*	BI 221, 222, 223 (C-)	*Ecampus only
Z 477	Aquatic Entomology (4)	W*	BI 221, 222, 223 (C-)	*Alternate odd years

## Ecology/Evolution/Conservation (EEC) electives:

Take two of the following.

Course	Description	Term(s)	Pre-/co-requisites	Comments
BI 301 <u>or</u> BI 348	Human Impacts on Ecosystems (3) Human Ecology (3)	W Sp*	BI 22X or CH 23x; sophomore + Sophomore +	*Ecampus only
BI 351	Marine Ecology (3)	W	BI 221, 222, 223 (C-)	
BI 353	Pacific Northwest Coastal Ecosystems (4)	Su*	BI 221, 222, 223 (C-)	*Hatfield only
BI 375	Field Methods in Ecological Restoration (3)	Su*	BI 221, 222, 223 (C-)	*Cascades (Bend) campus only
BI 427	Paleobiology (4)	Sp	BI 221, 222, 223 (C-)	Not offered 2022
BI 481	Biogeography (3)	W*	BI 370	*Alternate odd years
BI 495	Disease Ecology (3)	W*	BI 370 (C-)	*Alternate even years
BOT 341	Plant Ecology (4)	Sp	BI 22X (C-), BOT321 recommended	-
FES 440 <u>or</u> FES/FW445	Wildland Fire Ecology (3) Ecological Restoration (3)	W SP	BI 370 BI 370	- *See catalog
FW 320 <u>or</u> FW 421 <u>or</u> FW 427 <u>or</u> FW 479	Introductory Population Dynamics (3) Aquatic Biological Invasions (4) Principles of Wildlife Diseases (4) Wetlands & Riparian Ecology (3)	W ?* ?* ?*	BI 370 BI 221, 222, 223 (C-) BI 221, 222, 223 (C-) BI 221, 222, 223 (C-)	- *See catalog; Ecampus only *See catalog; Ecampus only *See catalog; Ecampus only
Z 349	Biodiversity: Causes, Conseq.& Conser (3)	F, W	BI 221; sophomore +	-

## Natural Resources/Management/Policy (NRMP) electives:

Select two of the following.

Course	Description	Term(s)	Pre-/co-requisites	Comments
AEC 250 <u>or</u> AEC 253	Environmental Economics & Policy (3) Env. Law, Policy & Econ. (4)	Sp W	-	*See catalog; Ecampus only -
AEC 432	Environmental Law (4)	Sp	-	-
ANS 280	Companion Animal Management (4)	Sp	-	-
BI 347	Oceans in Peril (3)	W	BI 150 or 221; sophomore +	-
BI 301 <u>or</u> BI 348	Human Impacts on Ecosystems (3) Human Ecology (3)	W Sp*	BI 22X or CH 23x; sophomore + Sophomore +	Cannot also be used above *Ecampus only; cannot also be counted above
FES 412	Forest Entomology (3)	Sp	BI 221, 222, 223 (C-)	
FES/FW 452	Biodiversity Conservation in Managed Forests (3)	W	BI 370	-
FES 485	Consensus and Natural Resources (3)	F, W		-
FOR 436	Wildland Fire Science & Management (4)	F		-
FOR 461	Forest Policy Analysis (3)	Sp		-
FW 350	Endangered Species, Society & Sustainability (3)	F	Sophomore +	-
FW 451	Avian Conservation and Management (3)	*	FW 311	*See catalog; Ecampus only
FW 458	Mammal Conservation & Manag. (4)	Sp	BI 22x and 3 upper division courses	-
PS 475	Environmental Politics and Policy (4)	*	-	*See catalog; Ecampus only
PS 477	Intern. Environment. Politics & Policy (4)	W	-	
SOC 481	Society and Natural Resources (4)	All*	Sophomore +	*See catalog; Ecampus only
TRAL352 <u>or</u> TRAL 357	Wilderness Management (3) Parks & Protected Areas Manage. (3)	All* F	- Sophomore +	*See catalog; Ecampus only

## Upper Division Science Elective:

Complete Track I (Experiential Credits) or Track II (Skills Course).

**Track I:** Experiential – 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	<a href="#">See online forms here</a>
BI 401	Research & Scholarship (1-3)	All	Department approval	<a href="#">See online forms here</a>
BI 406	Projects: Curatorial Assistant (1-3)	All	Department approval	<a href="#">See online forms here</a>
BI 409	Advanced Teaching Practicum (1-3)	All	Department approval	<a href="#">See online forms here</a>
BI 410	Internship (1-3)	All	Department approval	<a href="#">See online forms here</a>

**Track II:** Skills Course – select one course

Course	Description	Term	Pre-/co-requisites	Comments
ANS 435	Applied Animal Behavior (3)	F	Z 350	*See catalog
BI 375	Field Methods in Ecol. Restoration (4)	Su*	BI 221, 222, 223 (C-)	* Cascades (Bend) only; compressed summer course
BOT 425	Flora of the Pacific Northwest (3)	Sp	BOT 321 recommended	-
BOT 440	Field Methods in Plant Ecology (4)	Sp, Su*	BI 370, ST 351	*Ecampus only
CS 201	Computer Program. for Non CS Majors (3)	F	-	
FES 430	Forest as Classroom (4)	F, Sp*	-	*Ecampus only
FW 255	Field Sampling of Fish and Wildlife (3)	F, Sp	-	-
FW 430	Intro to Scientific Diving (4)	Sp	Requires rescue diver certifications	*See catalog
FW 498	Aquaculture Laboratory (3)	Su*	-	* Hatfield only
GEOG 360	GIScience I: Geographic Info. Syst. & Theory (4)	F, W, Sp	MH 112Z, ST 351	-
GEOG 452	Environmental Assessment (3)	Sp	-	
GEOG 453	Effective Comm. Environm. Change Science (3)	F	-	
LEAD 430	Foundations of Adventure Leadership	F, W	-	
NR 325	Sci. Methods Analyzing Nat. Res. Problems (3)	F	-	*See catalog, Ecampus only
RNG 353	Wildland Plant Identification (4)	F, Sp	-	-
RNG 441	Vegetation Monitoring and Analysis (4)	F	BI 221, 222, 223 (C-)	
TRAL 493	Environmental Interpretation (4)	Sp	-	-

## BI 498 Biology Major Field Test:

[BI 498 Biology Major Field Test](#): 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. [BI 498 Biology Major Field Test](#): 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 Zoology 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).