OREGON STATE UNIVERSITY
FISHERIES AND WILDLIFE SCIENCES

Advising Guide

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Disclaimer

For students admitted in Fall 2019 and later

Content in this guide is for advising purposes and is a useful planning tool. However, departments may change their course offerings and schedules without notice. For that reason, students should check the web catalog frequently for the most current course information.

https://catalog.oregonstate.edu/

Please help keep this guide up to date by reporting any broken links or information that has changed to:
Kendall.Kihn@oregonstate.edu

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Familiarize yourself with this Student Advising Guide as it will be your primary resource for planning your academic program. You'll use this guide frequently so bookmark the page or print out and keep a copy in a binder along with a copy of the syllabus for each class you take. This Advising Guide is updated frequently so print a new copy at least once a year. The year in which you are admitted to the Fisheries and Wildlife Sciences major will determine your "catalog year." The requirements in effect in that year are applicable to your academic program.

NOTE: This Student Advising Guide reflects the requirements for students who were admitted in the summer of 2019 or later.

Welcome to the Fisheries and Wildlife Sciences Degree Program at Oregon State University

The Fisheries and Wildlife Sciences degree is focused on using science to maintain sustainable populations of wild vertebrate animals and the habitats they depend upon. Consequently, core classes are organized around ecology and organismal and population biology. In addition, we require foundational physical sciences courses important for understanding and managing habitats. We cannot achieve these goals without considering humans and their impact on the planet. Thus, our degree includes a human dimensions requirement that focuses on the social sciences related to fish and wildlife conservation, including several courses designed by our faculty for that purpose.

We have created a series of professional development courses taught by our advisors (FW 107, FW 209, FW 307, and FW 410) to help students develop the knowledge and skills needed to be successful in this field. We further support students by allowing them to work with advisors to develop a specialty option that meets their individual career goals. We also require an internship (and support students in finding an internship opportunity), all focused on helping students be successful in a competitive job market. Interested to learn more about your career path? More information can be found at https://fw.oregonstate.edu/department-fisheries-and-wildlife/undergraduate/careers.

Fisheries and Wildlife Sciences Undergraduate Program Learning Outcomes

Specifically, the student will:

- Understand the physical and ecological elements and processes sustaining ecosystems and recognize the implications of altering those components.
- Be able to apply conservation principles in developing conservation approaches for ecosystems or organisms within ecosystems.
- Learn the need to incorporate social information in fisheries and wildlife management.
- Understand the biology, ecology, and evolution of at least one major vertebrate taxon, and can explain how the structure, behavior, and physiology of animals in that taxon adapts them to their environment and influences their ecology.
- Learn how to interpret, represent, and present data in figures and tables in accordance with professional standards.
- Learn to recognize biases and assumptions in published and unpublished scientific writing.
- Learn the use of logic, reasoning, analysis, and synthesis to arrive at defensible conclusions.
- Demonstrate the capacity to clearly and effectively express themselves in written communication.
- Demonstrate the capacity to clearly and effectively express themselves in oral presentations.
- Develop and learn about the importance of professional collegiality and team building.
- Demonstrate good interpersonal communication skills in interactions with their peers and FW faculty and staff.

Advising Rights and Responsibilities

OSU recognizes that quality academic advising is integral to the academic development and well-being of students. Quality academic advising includes both the prescriptive elements of advising (assisting with course selection, maintaining FW class checklist, tracking degree progress and completing degree audits, etc.) and the developmental aspects of advising (major and career decision making, integration in campus and academic cultures, assistance with and referrals surrounding issues affecting a student's academic success, etc.). For the advising relationship to be effective, students and advisors both need to be engaged in the process. Oregon State University advisors have created this list of **Advisor-Advisee Responsibilities** to outline the obligations of each:

As an advisee, you should:

- **Understand and accept that you are ultimately responsible for your education and your own decisions**.
- Initiate a purposeful relationship with your advisor and make appointments when requested and/or when necessary. Call to cancel appointments that cannot be kept.
- Utilize the technological resources available to you (MyDegrees, OSU Academic Catalog- https://catalog.oregonstate.edu/, Baccalaureate Core website- https://main.oregonstate.edu/baccalaureate-core, or department website) to inform yourself about your degree requirements and options.
- Prepare for and be active in your advising session, and ask questions when you have them.
- Work to clarify your personal values, abilities, and goals and share them with your advisor.
- Provide accurate and truthful information when being advised.
- Keep your local address and phone up to date in Online Services and utilize and **check your ONID account daily** for important information coming from your advisor and the institution.
- Learn and understand OSU's policies, procedures, and requirement as they relate to your academic success and/or degree completion.
- Follow through on plans-of-action identified during advising sessions.
- Be aware of and abide by https://registrar.oregonstate.edu/osu-academic-calendar.

Your advisor should:

- **Develop a purposeful relationship with and be an advocate for their advisees**.
- Inform students of the nature of the advisor/advisee relationship.
- Assist students in defining and developing expressed educational, career, and life plans.
- Provide timely and accurate educational information.
- Promote learning opportunities that will help students define or meet personal goals and plans.
- Assist students in preparing a program that is consistent with their abilities and interests.
- Monitor progress toward educational/career goals.
- Interpret and provide rationale for institutional policies, procedures and requirements.
- Inform inquiring students of campus resources and special services available to them.
- Refer students to those resources that can enhance or supplement their academic or personal experience.

Registration PIN Advising

Each term (except summer), a 6-digit PIN number is required to register for classes. PIN numbers are unique to each student and change with each term and must be provided by an Academic Advisor. The procedure for acquiring a PIN is outlined below:

On Campus students must make an appointment with their advisor each term to receive their Registration PIN. Students should come prepared to their appointments by filling out their MyDegrees Planner for the upcoming term, plus one or two additional terms. Corvallis campus-based students can use the scheduler tool to plan a weekly class schedule and they should have **at least two alternative courses selected in case they are unable to register for their first choices**. The Advisor will make suggestions, and/or approve the course plan, and provide the term Registration PIN.

Ecampus students will be contacted by their Advisor (via email) prior to the term registration period asking students to fill out their MyDegrees Planner for the upcoming term, plus one or two additional terms. The student should provide a plan for courses they intend to fulfill; it is good practice to have **at least two alternative courses selected in case they are unable to register for their first choices.** The Advisor will make suggestions, and/or approve the course plan, and provide the term Registration PIN.

Registration Dates. To find out when they can register, students can login to MyOSU, click on "Student" tab, and click on "View Priority Registration Status" once dates for the next term are posted. Priority registration, https://registrar.oregonstate.edu/priority-registration-0, is divided into two phases. Students can register for up to 16 credits in Phase I and up to 19 credits in Phase II, though full-time science majors generally take 15-16 credits. Waitlisting courses, https://registrar.oregonstate.edu/sites/registrar.oregonstate.edu/files/coursewaitlisting.mp4, is available in Phase II.

Curriculum Overview

The undergraduate curriculum for the Fisheries and Wildlife Sciences BS degree (180 credits) is composed of core courses as well as specializations of 24 credits. The core represents the educational foundation of fish and wildlife conservation, and the specializations provide students with an opportunity to build their degree program to meet specific career and educational goals. Working with faculty, students are encouraged to become engaged in designing their own education. The Baccalaureate Core requirements (45 credits) are a standard set of courses that are required for all Oregon State University students. (This section is waived for Post-Baccalaureate Students and Associate of Arts Oregon Transfer degree students except for two “Synthesis” courses.)

Useful credit hour numbers

180 - The minimum number of quarter credits needed to earn a baccalaureate degree at OSU. In addition to the University and degree program requirements, students in the **Fisheries and Wildlife Sciences program** must also meet specific FW Sciences requirements to graduate regardless of the number of credits transferred to the program.

60 - Minimum upper division (300-400 level) credits required to graduate from OSU.

124 - The maximum number of credits that can be transferred from a community college or another four-year higher education institution.

45 - The number of credit hours of the last 75 that must be OSU credit hours (academic residency requirement; includes OSU online courses).

24 - The number of credits applied toward Specialization; courses associated with these credits will appear in a student’s MyDegrees Checklist at the end of the FW 307 course and with approval by the student’s academic advisor.

The Fisheries and Wildlife Sciences major consists of these requirements (appearing as shown as "blocks" in MyDegrees Checklist) and associated credits:

- ***Fisheries and Wildlife Sciences Core – 69 credits***
- ***Vertebrate Biology and Systematics – 7-11 credits***
- ***Advanced Core – 18-26 credits***
- ***Physical and Earth Sciences – 9-14 credits***
- ***Human Dimensions - 9-11 credits***
- ***Specialization- 24 credits*** **-** courses added when you take FW 307 Specialization Development

Sequences

The Fisheries and Wildlife Sciences major provides students an opportunity to build their curriculum to meet specific academic and career goals. Students should complete most 200- and 300-level coursework before taking Advanced FW Core courses at the 400-level. Guidelines for specific series are as follows:

PROFESSIONAL SERIES

FW 107 -Orientation to Fisheries and Wildlife (1 credit)

- FW 107 provides an overview of the degree program and career pathways. FW 107 should be completed as early as possible in the program.

FW 209 – Career Skills and Internships (1 credit)

- FW 209 Career Skills in Fisheries and Wildlife Sciences prepares students for internships (see FW 410 Internships).
- FW 209 should not be added to degree planners until FW 107, FW 251, math, and the chemistry series are completed.

FW 307 – Developing a Specialization (1 credit)

- FW 307 is a course where students develop their Specialization, or focused area of study. FW 209 is a recommended prerequisite.
- The Specialization block of courses will appear in a student's MyDegrees Checklist after they have been approved in the course. While enrolled in FW 307, students work with their advisor in the creation of their specialization courses.

Specialization Courses (minimum 24 credits)

- The Specialization is intended to supplement the Advanced Fisheries and Wildlife Core and contain a minimum of 24 credits. At least 20 credits will be from upper division (300 and 400 level) courses; no more than four lower division credits are allowed.
- With the exception of Writing Intensive Courses (WIC), double counting is not permitted between Specialization and Departmental or other University course work.
- For students completing their first BS degree, 12 credit hours applied towards a minor may also be applied towards the Specialization with approval. Post Baccalaureate students may use up to 12 credits from their first degree towards their specialization with approval.
- A maximum of 12 credit hours, in any combination, of FW 401 Research and FW 410 International Internship can be used in the specialization.

FW 410- Internships (4 credits)

- Students are required to complete two types of internships, 'Exploratory' and 'Intensive.' These may be taken any time during the degree. Students need to consult with the Internship Coordinator to determine the appropriate time for them. See https://fw.oregonstate.edu/fisheries-and-wildlife/job-and-internship-resources for more information on how to contact the Internship Coordinator. For an explanation of the internships, visit the https://fw.oregonstate.edu/fisheries-and-wildlife/internships-3.
- Students are encouraged to start gaining professional experience by volunteering or interning with a natural resource agency no later than their junior year and to have both internships completed at least two terms prior to graduation.
- 'Exploratory' and 'Intensive' internships do not need to be taken in order.

SCIENCE FOUNDATION COURSE SEQUENCES

MATH

The Fisheries and Wildlife Sciences degree program requires one 200-level math course. Students who have not met this requirement can be placed in one of these courses by taking the required prerequisite courses or using the **ALEKS Math Placement Test:** http://www.math.oregonstate.edu/mlc-placement-home.

Do I need to take the ALEKS Math Placement Test?

- All first-year students must take the ALEKS Math Placement Test.
- All transfer and post-baccalaureate students newly admitted to OSU must take the ALEKS Math Placement Test, unless you have earned a C- or better in a college-level course from another college or university; or via a CLEP exam, AP exam, or IB exam.
- If it has been more than a year since your last math class, taking the ALEKS Math Placement Test is strongly recommended--the Learning Module, an individualized tutorial, will provide a good refresher for your next course.

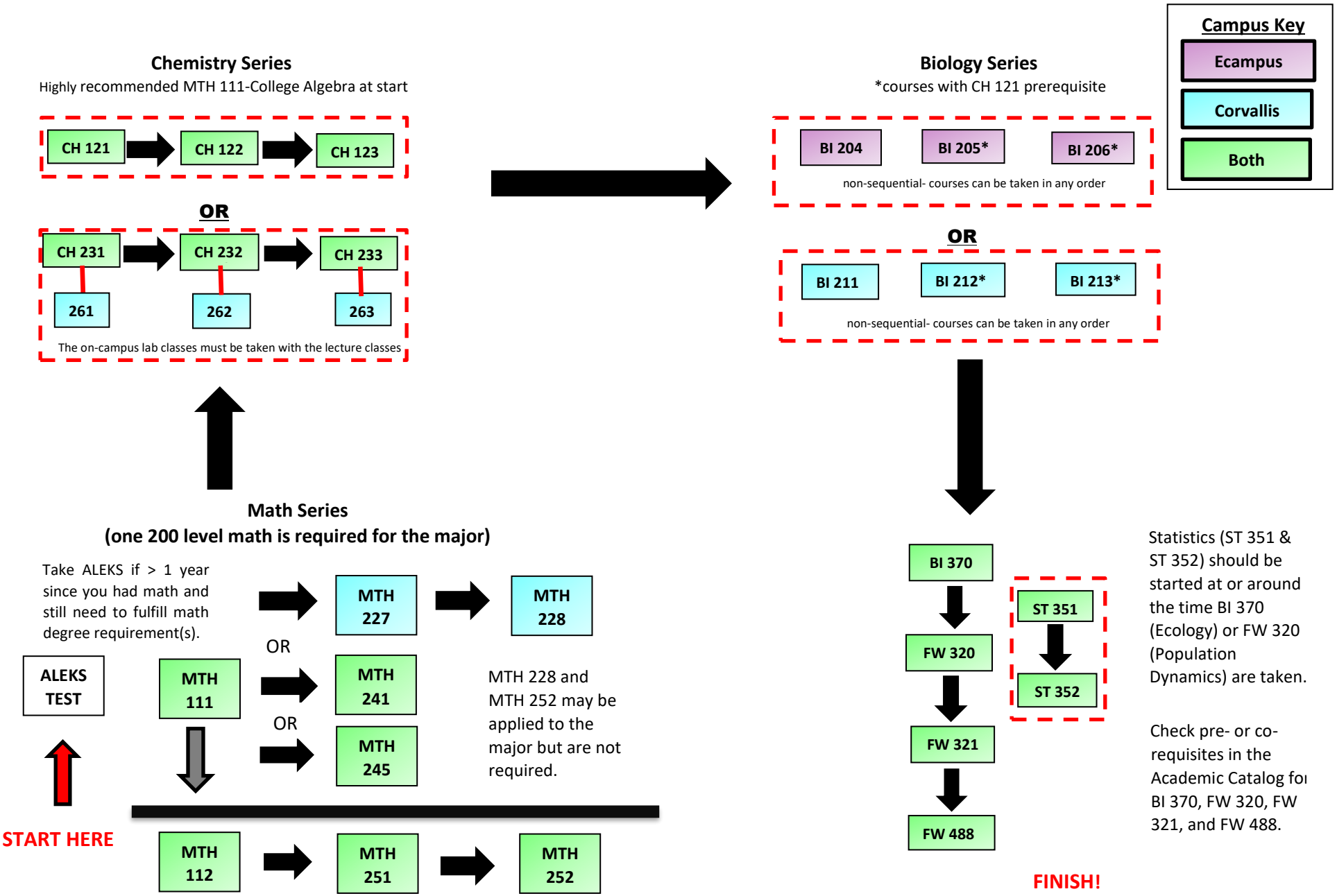
CHEMISTRY and BIOLOGY

- It is HIGHLY recommended your math level is at the college algebra (MTH 111) level or higher before taking CH 121 (the first course of the general chemistry series). CH 121 has a C- requirement to get into the next course in the series, CH 122.
- CH 121 is a pre or co-requisite for BI 205 and BI 206 (online) and BI 212 and BI 213 (on campus).
- Courses within the online biology series (BI 204, 205, 206) are intended for Ecampus students and do not need to be taken in order.
- Courses within the on-campus biology series (BI 211, 212, 213) do not need to be taken in order.
- The completed biology series is a prerequisite of BI 370 Ecology. A minimum grade of C- is required for each class. Online biology may not be appropriate for careers in Veterinary, Dental, or Medical Sciences, in which case the student should consult with their advisor.

BI 370 (Ecology) through FW 488 (Capstone)

- BI 370 is a pre- or co-requisite to FW 320; FW 320 is a pre- or co-requisite to FW 321; FW 321 is a pre- or co-requisite to FW 488.
- It is recommended ST 351 be taken prior to FW 320 and the approximate time that a student is taking BI 370. This will allow for some familiarity with statistics prior to FW 320.
- Statistics courses, ST 351 and ST 352, should be taken consecutively. Previously taken 100- and 200-level statistics courses do not meet the statistics requirements for the degree.
- FW 488 Problem Solving in Fisheries & Wildlife Science is the capstone course taken after a student has reached at least senior standing and is as close to the end of their program as possible. Students are required to complete FW 320 & FW 321 and should have taken one or more 400-level FW classes before they begin the capstone course.
- FW 488 is designed to introduce students to the synthesis of scientific information on species, habitats and ecosystems and the use of such data in shaping fisheries and wildlife conservation, management, and policy. It includes a group problem solving project and case studies.

Sequence Flowchart



MyDegrees

Oregon State University uses an online degree audit system to help you track your progress toward your degree. This is the tool that you and your advisor will use to plan your courses. Take some time to familiarize yourself with the tools and information provided by this system. The MyDegrees system will automatically apply classes to requirements. For students with classes from other institutions, please see the Transfer Student section below for more information. If you notice something is amiss, be sure to let your advisor know. Video tutorials, https://registrar.oregonstate.edu/video-tutorials, on using MyDegrees, registering for classes, adding and dropping classes and other helpful topics are available on the OSU Registrar's website.

Transfer Students

Students interested in how a course has been articulated by OSU can use the Transfer Course Search. The list is historical, so if no one transferred a course in the past, it will not be on the list and will need evaluation: https://adminfo.ucsadm.oregonstate.edu/prod/OSU_ADMTAM.P_tcs_splash_page. After Admissions has evaluated transfer classes, they will be automatically applied to your MyDegrees, if they have been previously evaluated by OSU. Classes that are electives or that have not been previously evaluated with show as LDT or UDT. Classes designated as NAT are not university-level transfer courses and will not count towards degree requirements. Your advisor will help determine how your transfer courses will apply to the program, during initial advising. For students attending community colleges in Oregon, please refer to the following webpage to determine how courses will articulate: https://admissions.oregonstate.edu/course-articulations

Course Restrictions and Overrides

Courses can be restricted to only allow the appropriate student population to enroll in the course. Restrictions can include prerequisite requirements, major/minor/option restrictions, and class standing restrictions. Before beginning registration, verify that you meet all restrictions on courses you intend to register for. Course restrictions are listed in the schedule of classes, https://classes.oregonstate.edu/. Don't be caught off guard at the time of registration. In many cases, a prerequisite override may be warranted. Below is a list of the most common **prerequisite** overrides.

1. Fisheries and Wildlife Sciences: email fw.advising@oregonstate.edu and include your OSU Student ID, the course title and registration number (CRN), and the term you need the prerequisite override. Classes with enforced prerequisites of the BI 2xx series (e.g., FW 370 and FW 316). For overrides into courses **offered outside of Fisheries and Wildlife**, contact those Departments directly.

2. Biology/Zoology: Students who completed their 200-level equivalent biology series or a portion of the series **at another institution,** will need overrides to take classes that have the **BI 2xx series as a prerequisite** even if the courses have been petitioned and approved. These overrides can be granted only if the classes have been completed with a minimum grade requirement. For prerequisite overrides to get into **biology or zoology classes** (e.g., BI 370, Z 473), contact the Integrative Biology (IB) Department. The IB Department has created a useful information page for biology overrides: http://ib.oregonstate.edu/advising/faq/prerequisites

3. Math: Read this first, before contacting the Math Department: https://math.oregonstate.edu/undergrad/common_registration_issues

4. Animal Science: contact Dr. Jim Hermes at james.hermes@oregonstate.edu and include your OSU Student ID, the course title and registration number (CRN), the term you need the prerequisite override, and why you require it. An example of a course that requires an override: **ANS 311 Principles of Animal Nutrition.**

S/U Grading

The Fisheries and Wildlife Sciences program allows one satisfactory/unsatisfactory (S/U) graded course in the major. Specialization courses are not allowed to be taken for an S/U grade. A maximum of 36 credits can be taken for an S/U grade in the Baccalaureate Core. You should familiarize yourself with this and other Academic Regulations, https://catalog.oregonstate.edu/regulations/. Advisors must approve a change in grading status to S/U so students should communicate with advisors if they want to use this option.

Add/Drop/Withdraw from Courses and Withdraw from Term

Academic Regulations (ARs) 11, 12, and 13 cover University rules pertaining to adding, dropping, and withdrawing from individual courses, as well as withdrawing from the term. Understanding these rules and knowing the deadlines for applying them can help you reduce college costs and protect your GPA from lowered grades. Unlike dropping a course, withdrawing from a course has costs. In most cases, you will be charged for a course if you withdraw from it, and a W grade will appear on your transcript for the course or courses you withdraw from. Every student is responsible for knowing academic regulations and for observing the procedures that govern their relations with Oregon State University. https://registrar.oregonstate.edu/dropwithdraw-course.

For students who rely on federal financial aid, scholarships, or other forms of financial aid, always check with the Financial Aid Office before withdrawing from a class. https://financialaid.oregonstate.edu/financial-aid

Double Counting

Double counting occurs when the same course satisfies two requirements (e.g., between the Bacc Core and the FW Sciences major). There are several rules to be aware of pertaining to double counting within the FW degree program:

- Courses may NOT be double counted within the FW major.
- **Within the major requirements, courses that double count are indicated by an asterisk (*) followed by an acronym (e.g., CGI, STS, SPI, DPD).**
- (CGI) & (STS) courses in the major may double count with Bacc Core but cannot be from the same Department.
- Double counting is not permitted between the Specialization and other university or departmental course work except in the following circumstances:
    - Applying a Writing Intensive Course (WIC) to Specialization
    - Students completing their first BS degree may apply 12 credits from the minor towards the Specialization (requires approval by advisor in minor department and FW advisor);
    - Post baccalaureate students who are completing their second degree may use a maximum of 12 credits from their first degree towards their specialization (approved by FW advisor).
    - Courses are allowed to be double counted in a minor if allowed by the department the offers the minor.

See page 24 for a table of double count examples.

Baccalaureate Core Requirements

The Baccalaureate Core is an OSU requirement for all majors. Post-Baccalaureate and Associate of Arts Oregon Transfer degree students need only complete the Synthesis and Writing Intensive Course requirements. Students must complete course work in four areas: Skills, Synthesis, Perspectives and a Writing Intensive Course (WIC). Students can use the Baccalaureate Core Schedules to search by category and term.

SKILL COURSES (see Baccalaureate Core Schedules, above for details)		
Writing 1[1]	3	WR 121
Writing 2[2]	3	WR 222, WR 327 (recommended); *See the OSU Academic Catalog for other course selections.*
Speech[1]	3	COMM 111, COMM 111H, COMM 114, COMM 211, COMM 218 (on campus only)
Lifetime Fitness and Health	2	HHS 231
Lifetime Fitness and Health Lab	1	HHS 241 or any PAC (Physical Activity Course)
Mathematics[1]	4	MTH 111 or fulfilled by Fisheries and Wildlife major mathematics requirement.
PERSPECTIVES		
Physical Science w/lab	4	*Can be fulfilled by Chemistry requirement in the FW Core*
Biological Science w/lab	4	*Can be fulfilled by Biology requirement in the FW Core*
Physical or Biological Science w/lab	4	*Can be fulfilled by Chemistry or Biology requirement in the FW Core*
Choose one class in each of the following five areas. No more than two courses from the same department are allowed. Courses shown double count in the FW major requirement (see FW major requirements below for double count category) but many other courses are available. In the OSU Academic Catalog, https://catalog.oregonstate.edu/earning-degrees/bcc/ and in this Advising Guide the Baccalaureate Core courses are designated with a "*". Writing Intensive Courses (WICs) are designated with a "^".		
Western Culture	3	*See the OSU Academic Catalog for course selections.*
Cultural Diversity	3	*See the OSU Academic Catalog for course selections.*
Literature & Arts	3	*See the OSU Academic Catalog for course selections.*
Social Processes & Institutions	3	*See the OSU Academic Catalog for course selections.*
Difference, Power, and Discrimination	3	*Can be fulfilled by Human Dimensions, Difference, Power, and Discrimination category.*
SYNTHESIS – courses may not be from the same Department		
Contemporary Global Issues	3	*See the OSU Academic Catalog for course selections. Double counts: FW 345, GEO 308, AEC 351, AEC/ECON 352, FW 324, FW 325, PHL/REL 443, SOC 480*
Science, Technology & Society	3	*See the OSU Academic Catalog for course selection. Double counts: BI 345, PH 331, PH 332, GEO 305, GEO 306, GEO 307, FW 350, ANTH 481, FW 360, GEOG 340, HST 481, PS 476, SOC 481*
WRITING INTENSIVE COURSE (WIC)^	3-4	*Suggested for major (these can double count with other requirements): FW 435, FW 439, FW 454, FW 497*

[1] Must be completed satisfactorily within the first 45 hours of OSU generated credits.

[2] Must be completed satisfactorily within the first 90 hours of OSU generated credits. For transfer students with sophomore standing or above, *Writing II and Speech* must be completed within the first 45 hours of OSU-generated credits.

Department of Fisheries and Wildlife Sciences

Major Requirements

Additional on-campus or transfer courses may fulfill requirements as well; please consult your advisor.
Classes subject to change at any time. Verify offerings online in the Schedule of Classes.

COMMUNICATIONS (3 credits)

WRITING- SELECT ONE							
Course #	Course Name	Credits	CORVALLIS	ECAMPUS	HMSC	Prerequisites	Restrictions /Advising Notes
HC 199*	Honors Writing	3	F, W, S			pr: D- or better required in WR 121 **and** Honors College approval	
WR 222*	English Composition	3	F, W, S	F, W, S, U		pr: C- or better required in WR 121	
WR 327*	Technical Writing (highly recommended)	3	F, W, S, U	F, W, S, U		pr: C- or better required in WR 121	Freshman may not enroll
WR 362*	Science Writing	3	F, S	W, U		pr: C- or better required in WR 121	
WRITING INTENSIVE COURSE (WIC) can double count with other requirements (3-4 credits) SELECT ONE							
	FW 435, FW 439, FW 454, FW 497						

FISHERIES AND WILDLIFE SCIENCES CORE (69 credits)

MATHEMATICS- SELECT ONE							
Course #	Course Name	Credits	CORVALLIS	ECAMPUS	HMSC	Prerequisites	Restrictions /Advising Notes
MTH 227*	Calculus and Probability for the Life Sciences I	4	W, S			pr: C- or better required in MTH 112 ***or*** min score of 75 on ALEKS	
MTH 241*	Calculus for Management and Social Science	4	F, W, S, U	F, W, S, U		pr: C- or better required in MTH 111 ***or*** min score of 60 on ALEKS	
MTH 245*	Mathematics for Management, Life and Social Sciences	4	S, U	F, W, S, U		pr: C- or better required in MTH 111 ***or*** min score of 60 on ALEKS	
MTH 251*	Differential Calculus	4	F, W, S, U	F, W, S, U		pr: C- or better required in MTH 112 ***or*** min score of 75 on ALEKS	
CHEMISTRY- SELECT A SERIES							
Course #	Course Name	Credits	CORVALLIS	ECAMPUS	HMSC	Prerequisites	Restrictions /Advising Notes
CH 121	General Chemistry	5	F, W	F, W, S, U		rec: working knowledge of HS Algebra, logarithms and scientific notations	C- or better required; avoid class in summer, which is in accelerated 4- or 8-week format
CH 122*	General Chemistry	5	W, S	F, W, S, U		pr: C- or better required in CH 121 ***or*** CH 201 ***or*** CH 231	C- or better required; avoid class in summer, which is in accelerated 4-week format
CH 123*	General Chemistry	5	S, U	F, W, S, U		pr: C- or better in CH 122 ***or*** (CH 232 **and** CH 262 ***or*** 272) ***or*** (CH 202 **and** 205)	C- or better required; avoid class in summer, which is in accelerated 3-week format
OR *substitute CH 121-123 with CH 231-233 lectures & CH 261-263 with Corvallis labs*							See schedule of classes

* =Bacc Core ^ = Writing Intensive Course (WIC)
pr= prerequisite coreq=co-requisite rec= recommended
HMSC = Hatfield Marine Science Center
F= FALL TERM W = WINTER TERM S = SPRING TERM U = SUMMER TERM

BIOLOGY- SELECT A SERIES

Course #	Course Name	Credits	CORVALLIS	ECAMPUS	HMSC	Prerequisites	Restrictions /Advising Notes
BI 211*	Principles of Biology	4	F, U				C- or better required
BI 212*	Principles of Biology	4	W, U			pr or coreq: C- or better required in CH 121 ***or*** CH 201 ***or*** CH 221 ***or*** (CH 231 **and** CH 261)	C- or better required
BI 213*	Principles of Biology	4	S, U			pr or coreq: C- or better required in CH 121 ***or*** CH 201 ***or*** CH 221 ***or*** (CH 231 **and** 261 or 271)	C- or better required
OR *Ecampus students may substitute the BI 204, 205, 206 series for BI 211, 212, 213*							
BI 204*	Introduction to Biology	4		F, W			C- or better required
BI 205*	Introduction to Biology	4		W, S		pr or coreq: C- or better required in CH 121 ***or*** CH 201 ***or*** (CH 231 **and** CH 261 ***or*** 271)	C- or better required
BI 206*	Introduction to Biology	4		F, S		pr or coreq: C- or better required in CH 121 ***or*** 201 ***or*** (CH 231 **and** CH 261 ***or*** 271)	C- or better required

NOTE: The 2XX level of biology is **REQUIRED** in the Ecological Restoration, Fish and Wildlife Conservation, Forest Ecosystems, Wildland Fire Ecology and Urban Forest Landscapes Specializations. It is a prerequisite for BI 370 General Ecology and often required for some federal jobs. It may be required in the Integrated Conservation Analysis or Individualized Specialty Option depending on the disciplinary focus.

ECOLOGY- REQUIRED

Course #	Course Name	Credits	CORVALLIS	ECAMPUS	HMSC	Prerequisites	Restrictions /Advising Notes
BI 370	Ecology	3	F, W, S	F, W, S, U		pr: C- or better required in BI 211,212,213 ***or*** BI 204, 205, 206	

STATISTICS- REQUIRED

Course #	Course Name	Credits	CORVALLIS	ECAMPUS	HMSC	Prerequisites	Restrictions /Advising Notes
ST 351	Intro to Statistical Methods	4	F, W, S, U	F, W, S, U		rec: high school algebra with statistics	
ST 352	Intro to Statistical Methods	4	F, W, S, U	F, W, S, U		pr: D- or better required in ST 351	

FISHERIES AND WILDLIFE- ALL REQUIRED

Course #	Course Name	Credits	CORVALLIS	ECAMPUS	HMSC	Prerequisites	Restrictions /Advising Notes
FW 107	Orientation to Fisheries and Wildlife	1	F	F, W, S, U			
FW 209	Career Skills in Fisheries and Wildlife Sciences	1	F, W, S	F, W, S		pr: P required in FW 107	Freshman may not enroll
FW 251	Principles of Fish and Wildlife Conservation	3	W	F, W, S, U		rec: one course in introductory biology	
FW 255	Field Sampling of Fish and Wildlife	3	F, W, S	F, W, S, U		rec: WR 121 **and** familiarity with personal computers	
FW 289	Communication Skills for Fisheries and Wildlife Professionals	4	S	F, W, S		rec: FW 251	
FW 307	Specialization Development	1	F, S	F, W, S		rec: FW 209	Freshman may not enroll

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FISHERIES AND WILDLIFE CONTINUED							
Course #	Course Name	Credits	CORVALLIS	ECAMPUS	HMSC	Prerequisites	Restrictions /Advising Notes
FW 320	Introductory Population Dynamics	4	W	F, W, S, U		pr or coreq: BI 370 **or** BI 371 rec: MTH 245 or higher	
FW 321	Applied Community and Ecosystem Ecology	3	S	F, W,S		pr or coreq: FW 320	Corvallis = No Freshman or Sophomore
FW 410	Internship: Exploratory	1	F, W, S, U	F, W, S, U		Instructor's consent	
FW 410	Internship: Intensive	3	F, W, S, U	F, W, S, U		Instructor's consent	
FW 488	Problem Solving in Fisheries & Wildlife Science	3	W	F, W		pr or coreq: FW 320 **and** FW 321	Freshman, Sophomore or Junior may not enroll Students can substitute FW 426 CERM

VERTEBRATE BIOLOGY AND SYSTEMATICS (7-11 credits)

VERTEBRATE BIOLOGY- SELECT ONE							
Course #	Course Name	Credits	CORVALLIS	ECAMPUS	HMSC	Prerequisites	Restrictions /Advising Notes
FW 302	Biology and Conservation of Marine Mammals	4	U	F,S		rec: one year of introductory biology	
FW 311	Ornithology	3	S	F, W, S, U		rec: one year of introductory biology	Corvallis= Freshman may not enroll
FW 315	Ichthyology	3	F	F, W, S, U		rec: one year of introductory biology	Freshman may not enroll
FW 317	Mammalogy	3	W	F, W, S, U		rec: one year of introductory biology	Corvallis = Junior/Senior Standing
FW 331	Ecology of Marine and Estuarine Birds	4			U	rec: one year of introductory biology	
Z 473	Herpetology	4		F		pr: C- or better required in BI 211,212,213 ***or*** BI 204, 205, 206	
SYSTEMATICS- SELECT ONE							
Course #	Course Name	Credits	CORVALLIS	ECAMPUS	HMSC	Prerequisites	Restrictions /Advising Notes
FW 312	Systematics of Birds	2	F	F, W, S, U		rec: one year of introductory biology	
FW 316	Systematics of Fishes	3	F	W, U		pr: D- or better required in BI 211,212,213 ***or*** BI 204, 205, 206 rec: FW 315	
FW 318	Systematics of Mammals	2	W	W, S, U		rec: one year of introductory biology	Freshman may not enroll
Additional Vertebrate Biology or Systematics- SELECT ONE see schedule above							

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ADVANCED CORE (18-26 credits)

Courses that double count are indicated by an asterisk (*) followed by an acronym (e.g., CGI, STS, SPI, DPD). ^ WIC courses can double count.

GENETICS & EVOLUTION- SELECT ONE							
Course #	Course Name	Credits	CORVALLIS	ECAMPUS	HMSC	Prerequisites/Restrictions	Restrictions /Advising Notes
ANS 378	Animal Genetics	4	F	S		pr: C- or better required in BI 211, 212, 213 rec: ANS 121 **and** ST 351	
BI 311	Genetics	4	F, W, S, U	F, W, S		pr: C- or better required in BI 211, 212, 213 ***or*** BI 204, 205, 206	
BI 345*	Introduction to Evolution (STS)	3		W, S, U			Freshman may not enroll
FW 370	Conservation Genetics	4		F, W, S		pr: C- or better required in BI 211, 212, 213 ***or*** BI 204, 205, 206	
PBG 430	Plant Genetics	3	W	F		rec: one year of biology and chemistry	

BEHAVIOR AND PHYSIOLOGY- SELECT ONE							
Course #	Course Name	Credits	CORVALLIS	ECAMPUS	HMSC	Prerequisites	Restrictions/Advising Notes
ANS 311	Principles of Animal Nutrition	3	F	U		pr: D- or better required in BI 211 **and** BI 212	Corvallis= Freshman or Sophomore may not enroll
ANS 314	Animal Physiology	4	W	U		pr: junior standing or higher rec: BI 211, 212, 213 **or** BI 204, 205, 206	Freshman or Sophomore may not enroll
FW 469	Methods in Physiology and Behavior of Marine Megafauna	4		F		rec: one year of introductory biology **and** 9 credits of upper-division FW or BI courses	Hybrid course with HMSC
FW 471	Environmental Physiology of Fishes	4	W			rec: FW 315 **and** (BI 370 ***or*** BI 371)	
FW 475	Wildlife Behavior	4		F, W, S		rec: 9 credits upper-division biology	
FW 476	Fish Physiology	4		S		pr: D- or better required in FW 315	
Z 350	Animal Behavior	3	W	S		pr: C- or better required in BI 211, 212, 213 ***or*** BI 204, 205, 206	
Z 423	Environmental Physiology	3	F	W		pr: C- or better required in BI 211, 212, 213 ***or*** BI 204, 205, 206	
Z 431, 432	Vertebrate Physiology	4	W431, S432			pr or coreq: C- or better required in BI 211, 212, 213 **and** D- or better required in CH 332 ***or*** 335	C- or better required in Z 431

HABITATS AND ECOSYSTEMS- SELECT ONE

Course #	Course Name	Credits	CORVALLIS	ECAMPUS	HMSC	Prerequisites	Restrictions /Advising Notes
BI 351	Marine Ecology	3	W	F		pr: C- or better required in BI 211,212,213 ***or*** BI 204, 205, 206	
FES 341	Forest Ecology	3	F	F, S			
FES 342	Forest Types of the Northwest	3		W			
FES 440	Wildland Fire Ecology	3	W	W, S		rec: Jr or Sr standing, course work in ecology **and** NR MGMT	
FW 345*	Global Change Biology (CGI)	3	S			rec: introductory biology **and** ecology course such as BI 370	
FW 426	Coastal Ecology & Resource Management	5		F	F	Departmental approval rec: FW 320	No Freshman or Sophomore may enroll
FW/OC 434	Estuarine Ecology	4	F	W			
FW 435^	Wildlife in Agricultural Ecosystems	3	W	F, W, S		rec: BI 370 **and** FW 251	Corvallis = No Freshman or Sophomore may enroll
FW/FES 445	Ecological Restoration	4	S	F, S, U		rec: BI 370	
FES/FW 452	Biodiversity Conservation in Managed Forests	3	S	F		rec: FES 240 ***or*** FES 341 ***or*** BI 370	No Freshman or Sophomore may enroll
FW 456	Freshwater Ecology and Conservation	5	S	W, S		pr: D- or better required in BI 370 ***or*** 371 rec: 9 credits of upper-division bio science	Corvallis = No Freshman or Sophomore or Junior may enroll
FW 462	Ecosystem Services	3		W, S		rec: BI 370	
FW 467	Antarctic Science and Conservation	4		W			
FW 479	Wetlands and Riparian Ecology	3	S	F, W, S, U		rec: BI 370 ***or*** BI 371	
RNG 341	Rangeland Ecology and Management	3	F, W	F, W, S, U			

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SPECIES CONSERVATION & MANAGEMENT- SELECT ONE							
Course #	Course Name	Credits	CORVALLIS	ECAMPUS	HMSC	Prerequisites	Restrictions /Advising Notes
FW 419	The Natural History of Whales and Whaling	3		W	F	rec: some background in vertebrate ecology and evolution or genetics	
FW/BI 421	Aquatic Biological Invasions	4		W	U	rec: one year of university-level biology	
FW 427	Principles of Wildlife Diseases	4		S, U		pr: Junior standing or higher	
FW 451	Avian Conservation and Management	3		F, W		rec: FW 311	
FW 454^	Fishery Biology	4	F	W		pr: D- or better is required in FW 315 **and** FW 320	
FW 458	Mammal Conservation and Management	4	S	F, W		rec: 9 credits of upper-division biological sciences	
FW 464	Marine Conservation Biology	3	F		F	pr: D- or better required in BI 370	
FW 473	Fish Ecology	4	W	S		pr: D- or better required in BI 370 **and** FW 315	
FW 474	Early Life History of Fishes	4	F			rec: FW 315	
FW 481	Wildlife Ecology	4	F	S, U		pr: D- or better required in BI 370 **or** BI 371	No Freshman or Sophomore may enroll
FW/MB 491	Fish Diseases in Conservation Biology and Aquaculture	3	S			rec: 9 credits of upper-division fisheries biology	
BOTANY - SELECT ONE- students may sub FW 434 or FW 479 for this category with advisor approval							
Course #	Course Name	Credits	CORVALLIS	ECAMPUS	HMSC	Prerequisites	Restrictions /Advising Notes
BOT 313	Plant Structure	4	W	S, U		pr: (BI 211 **and** 212) ***or*** BI 213 ***or*** (BI 205 **and** 206)	rec: BI 213
BOT 321	Plant Systematics	4	S			rec: BI 213	
BOT 323^	Flowering Plants of the World	3	W			rec: one year of college biology	
BOT 331	Plant Physiology	4	W	W, S		pr: D- or better required in BI 212 **and** BI 213 ***or*** BI 205 **and** 206 **and** CH 123 ***or*** (CH 233 and 263)	rec: BI 213 **and** (CH 123 ***or*** (CH 233 **and** CH 263))
BOT 341	Plant Ecology	4	S	F, S		rec: BOT 321 and BI 213	
BOT 416	Aquatic Botany	4	F	F		rec: BOT 213	
BOT 440	Field Methods in Plant Ecology	4		S, U		rec: a course in ecology and statistics	
BOT 442	Plant Population Ecology	3				BOT 341 ***or*** equivalent	Not currently scheduled.
BOT 488	Environmental Physiology of Plants	3	W			rec: a course in plant physiology or ecology	
RNG 353	Wildland Plant Identification	4	F	S, U			
ADDITIONAL COURSE IN THE FW ADVANCED CORE LIST- SELECT ONE see schedule above							

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PHYSICAL AND EARTH SCIENCES (9-14 credits)

Courses that double count are indicated by an asterisk (*) followed by an acronym (e.g., CGI, STS, SPI, DPD).

SELECT THREE courses from the categories below:

PHYSICS, MATH & CHEMISTRY

Course #	Course Name	Credits	CORVALLIS	ECAMPUS	HMSC	Prerequisites/Restrictions	Restrictions /Advising Notes
CH 130	General Chemistry of Living Systems	4		S, U			
CH 331	Organic Chemistry	4	F, W, U	F, W		pr: C- or better required in CH 123, 223 ***or*** 226H ***or*** (CH 233 **and** CH 263 ***or*** 273)	
CH 332	Organic Chemistry	4	W, S, U	W, S		pr: C- or better required in CH 331	
CH 390	Environmental Chemistry	3	W, S	W, S		pr: D- or better required in CH 331 ***or*** 334	
MTH 227*	Calculus and Probability for the Life Sciences I	4	W, S			pr: C- or better required in MTH 112 ***or*** min score of 75 on ALEKS	
MTH 228	Calculus and Probability for the Life Sciences II	4	F, S			pr: C- or better required in MTH 227	
MTH 241*	Calculus for Management and Social Science	4	F, W, S, U	F, W, S, U		pr: C- or better required in MTH 111 ***or*** min score of 60 on ALEKS	
MTH 251*	Differential Calculus	4	F, W, S, U	F, W, S, U		pr: C- or better required in MTH 112 ***or*** min score of 75 on ALEKS	
MTH 252	Integral Calculus	4	F, W, S, U	F, W, S, U		pr: C- or better required in MTH 251	
OC 450	Chemical Oceanography	3	W			pr: D- or better required in CH 122 ***or*** 232 rec: one year college-level chemistry	
PH 201*	General Physics	5	F, U			rec: MTH 111 **and** 112	
PH 202*	General Physics	5	W, U			rec: MTH 111, 112 **and** PH 201	
PH 205*	Solar System Astronomy	4		F, S		rec: working knowledge of basic algebra, logarithms and scientific notation	
PH 206*	Stars and Stellar Evolution	4		U			
PH 207*	Galaxies, Quasars and Cosmology	4		W			
PH 211*	General Physics with Calculus	4				Coreq: MTH 252 **and** a PH 221 recitation section rec: MTH 251	
PH 212*	General Physics with Calculus	4	F, W, S, U			pr: D- or better required in PH 211 rec: MTH 252 **and** coreq: PH 222 **and** MTH 254	
PH 331*	Sound, Hearing and Music (STS)	3	W			rec: upper-division standing **and** one year of university science	
PH 332*	Light, Vision and Color (STS)	3				rec: upper-division standing **and** one year of university science	Not currently scheduled.

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EARTH SCIENCES							
Course #	Course Name	Credits	CORVALLIS	ECAMPUS	HMSC	Prerequisites/Restrictions	Restrictions /Advising Notes
ATS 201*	Climate Science	4	F, S	F, W, S, U			
GEO 201*	Physical Geology	4	F, W				
GEO 202*	Earth Systems Science	4	W				
GEO 203*	Evolution of Planet Earth	4	S				
GEO 221*	Environmental Geology	4	S	F, W			
GEO 305*	Living with Active Cascade Volcanoes (STS)	3	F, U	F			
GEO 306*	Minerals, Energy, Water and the Environment (STS)	3	S	F, W, U			
GEO 307*	National Park Geology Preservation (STS)	3	F	S, U			
GEO 308*	Global Change and Earth Sciences (CGI)	3	F, W, U	W, S, U			
OC 201*	Oceanography	4	F, W	F, SP			
OC 332	Coastal Oceanography	3	W		U		Corvallis=Freshman may not enroll
SOIL 205*	Soil Science	3	F, W, S, U			pr or coreq: D- or better required in SOIL 206 ***or*** FOR 206	
CSS 205*	Soil Science	4		F, W, S, U			Ecampus version of SOIL 205

HUMAN DIMENSIONS (9-11 credits)

Courses that double count are indicated by an asterisk (*) followed by an acronym (e.g., CGI, STS, SPI, DPD).

DIFFERENCE, POWER AND DISCRIMINATION- SELECT ONE							
Course #	Course Name	Credits	CORVALLIS	ECAMPUS	HMSC	Prerequisites/Restrictions	Restrictions /Advising Notes
AG 301*	Ecosystem Science of Pacific NW Indians (DPD)	3	S	F, W, S, U			
FW 340*	Multicultural Perspectives in Natural Resources (DPD)	3	F, W, U	F, W			
GEO 309*	Environmental Justice (DPD)	3	W	S		pr: C- or better required in WR 121 rec: Sophomore standing	

ENVIRONMENTAL LAW, POLICY AND ECONOMICS- SELECT ONE

Course #	Course Name	Credits	CORVALLIS	ECAMPUS	HMSC	Prerequisites/Restrictions	Restrictions /Advising Notes
AEC 250*	Introduction to Environmental Economics and Policy (SPI)	3	W	F, W, S, U		rec: MTH 111	
AEC 253*	Environmental Law, Policy and Economics (WC)	4	W	F, W, U			
AEC 351*	Natural Resource Economics and Policy (CGI)	3	F	F, S		pr: D- required in AEC 250, AREC 250 **or** ECON 201 rec: MTH 111	
AEC/ ECON 352*	Environmental Economics and Policy (CGI)	3	F, S	F, S, U		pr: D- required in AEC 250, AREC 250 **or** ECON 201	
AEC 432	Environmental Law	4	S	S			
FOR 462	Natural Resource Policy and Law	3					Not currently scheduled.
FW 350*	Endangered Species, Society and Sustainability (STS)	3	F	F, W, S, U		rec: FW 251	
FW 415	Fisheries and Wildlife Law and Policy	3		W		rec: PS 201 or other introductory political science course	
FW 422	Introduction to Ocean Law	3		F			
PPOL 448	Marine Policy in the US	4		S			
PS 475	Environmental Politics and Policy	4		F, W, S, U			
PS 477	International Environmental Politics and Policy	4	F, W	F, W, S, U			

OTHER- SELECT ONE

Course #	Course Name	Credits	CORVALLIS	ECAMPUS	HMSC	Prerequisites/Restrictions	Restrictions /Advising Notes
ANTH 477	Ecological Anthropology	4		F		rec: upper-division standing and 3 credits of social science	
ANTH 481*	Natural Resources and Community Values (STS)	3	S	U		rec: 3 credits of social science	
BOT 322	Economic and Ethnobotany: Role of Plants in Human Culture	3		W, S			
FES 355	Management for Multiple Resource Values	3		F, S			
FES 422	Research Methods in Social Science	4	W	F		pr: D- or better is required in ST 201 ***or*** 351	
FES 485*	Consensus and Natural Resources (STS)	3	F, W	W, U			
FW 324*	Food from the Sea (CGI)	3	S	U			
FW 325*	Global Crises in Resource Ecology (CGI)	3		F, W, S, U			

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OTHER CONTINUED

Course #	Course Name	Credits	CORVALLIS	ECAMPUS	HMSC	Prerequisites/Restrictions	Restrictions /Advising Notes
FW 360*	Origins of F & W Management- Evo., Gen., & Ecol. (STS)	3		F, W, U		rec: two terms of coursework at OSU	
FW 391	Ridge to Reef: Sustainable Resource MGMT in Palau	4	U			pr: departmental approval	Study abroad in Palau
FW 439^	Human Dimensions of F & W Management	3		F		rec: FW 251 **and** introductory statistics	
GEOG 340*	Introduction to Water Science and Policy (STS)	3	S, U	F, W, S, U			
HST 481*	Environmental History of the US (STS)	4	W	F, W, S, U		rec: HST 201, 202 **and** 203	Corvallis= Freshman or Sophomore may not enroll
PHL 440*	Environmental Ethics (CGI)	3	F, S	U		rec: PHL 205, 342 **and** 365 ***or*** 6 credits of philosophy and sophomore standing	
PHL/ REL 443*	World Views and Environmental Values	3	F, W, S, U	F, W, S, U		rec: one introductory science course **and** sophomore standing	
PS 461	Environmental Political Theory	4					Not currently scheduled.
PS 476*	Science and Politics (STS)	4	S	W, S, U			
SOC 480*	Environmental Sociology (CGI)	4	F	U			Corvallis= Freshman or Sophomore may not enroll
SOC 481*	Society and Natural Resources (STS)	4	W, S	F, W, S, U			Corvallis= Freshman or Sophomore may not enroll
TRAL 354	Communities, Natural Areas and Sustainable Tourism	3	W				
TRAL 493	Environmental Interpretation	4	S	F, W, S, U			Corvallis= Freshman or Sophomore may not enroll

SPECIALIZATION (24 credits) courses selected when you take FW 307

ELECTIVES (0-20 credits) for first degree students

FW 112	The Science of Fly Fishing for Trout						Not currently scheduled.
FW 113	Introduction to Marine Life in the Sea- Marine Birds and Mammals	1		S		rec: High school biology and chemistry	
FW 301	Field Techniques for Marine Mammal Conservation	1			U	pr or coreq: D- or better required in BI 302 ***or*** FW 302	
FW 303	Survey of GIS in Natural Resources	3		F, W, S, U			

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ADDITIONAL FW COURSES THAT COULD COUNT TOWARDS THE SPECIALIZATION OR ELECTIVE SECTIONS							
Course #	Course Name	Credits	CORVALLIS	ECAMPUS	HMSC	Prerequisites/Restrictions	Restrictions /Advising Notes
FW 323	Management Principles of Pacific Salmon in the NW	3		F, W, S, U			
FW 326	Integrated Watershed Management	3		F, W, S, U		rec: FW 251	
FW 328	Wildlife Capture and Immobilization	2	W, U	F			
FW 341	Fish and Wildlife Law Enforcement	2	F				
FW 356	Citizen Science	3		W, U			
FW 366	Environmental Contaminants in Fish and Wildlife	3		W		pr: D- or better required in BI 204 ***or*** 211 **and** BI 205 or 212	
FW 407	Seminar	Varies- see schedule of classes					
FW 431	Dynamics of Marine Biological Resources						Not currently scheduled.
FW 470	Ecology and History: Landscape of the Columbia Basin						Not currently scheduled.
FW 489	Effective Communications in the Fisheries and Wildlife Science	3		W, S			Freshman, Sophomore or Junior may not be enroll
FW 493	Field Methods for Marine Research	3			U	rec: one year of biology	
FW 496	Fish Diseases in Conservation Biology and Aquaculture Lab						Not currently scheduled.
FW 497	Aquaculture	3		F		rec: 9 credits of upper-division biology	
FW 498	Aquaculture Lab	3			U	rec: 9 credits of upper-division biology	
FW 499	Special Topics	Varies- see schedule of classes					

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Fisheries and Wildlife Sciences (FW) courses that double count with Baccalaureate Core courses

Within the major requirements, courses that double count are indicated by an asterisk (*) followed by an acronym (e.g., CGI, STS, SPI, DPD).

This course...		satisfies credits in this FW block		...and can fulfill a bacc core requirement in this group
Course #	**Name**		**Credits**	
FW 345	Global Change Biology	FW Advanced Core	3	Contemporary Global Issues (CGI)
GEO 308	Global Change and Earth Sciences	Physical and Earth Sciences	3	
AEC 351	Natural Resource Economics & Policy	Human Dimensions	3	
AEC/ECON 352	Environmental Economics & Policy		3	
FW 324	Food from the Sea		3	
FW 325	Global Crises in Resource Ecology		3	
PHL/REL 443	World Views & Environmental Values		3	
SOC 480	Environmental Sociology		4	
BI 345	Introduction to Evolution	FW Advanced Core	3	Science Technology & Society (STS)
PH 331	Sound, Hearing, and Music	Physical and Earth Sciences	3	
PH 332	Light, Vision, and Color		3	
GEO 305	Living with Active Cascade Volcanoes		3	
GEO 306	Minerals, Energy, Water, and the Environment		3	
GEO 307	National Park Geology and Preservation		3	
FW 350	Endangered Species, Society, Sustainability	Human Dimensions	3	
ANTH 481	Natural Resources & Community values		3	
FES 485	Consensus & Natural Resources		3	
FW 360	Origins of FW Mgt- Evolution, Genetics, and Ecology		3	
GEOG 340	Introduction to Water Science and Policy		3	
HST 481	Environmental History of the US		4	
PS 476	Science & Politics		4	
SOC 481	Society & Natural Resources		4	
AG 301	Ecosystem Science of Pacific NW Indians	Human Dimensions	3	Difference, Power, & Discrimination (DPD)
FW 340	Multicultural Perspectives in Natural Resources		3	
GEO 309	Environmental Justice		3	
AEC 250	Introduction to Environmental Economics & Policy		3	Social Processes &Institutions (SPI)
AEC 253	Environmental Law, Policy, and Economics		4	Western Culture (WC)

Consult https://catalog.oregonstate.edu/ for prerequisite information

Note: Courses counted towards STS & CGI requirements cannot be from the same department