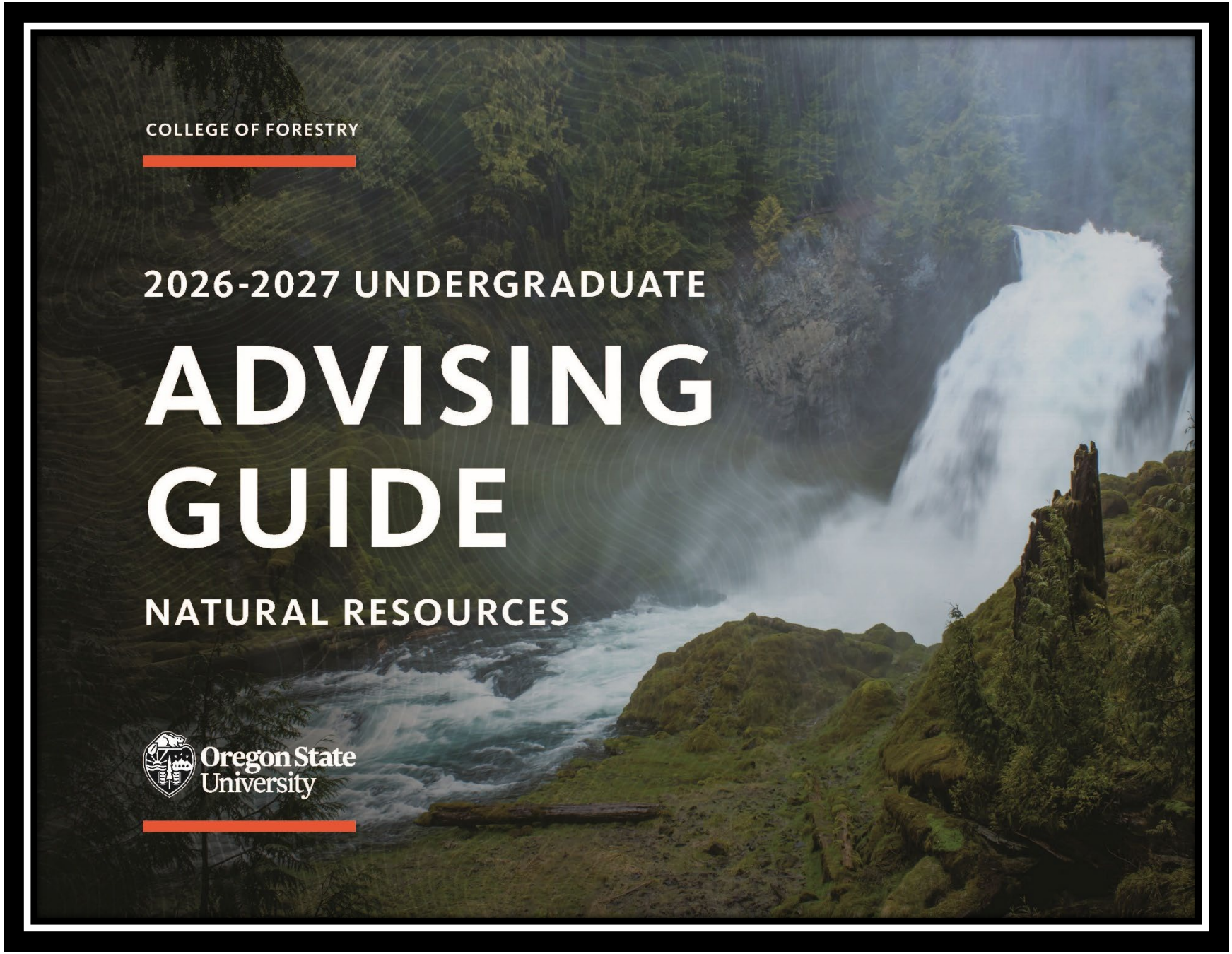

COLLEGE OF FORESTRY
2026-2027 UNDERGRADUATE
ADVISING GUIDE
NATURAL RESOURCES
Oregon State University

Department of Forest Ecosystems and Society
College of Forestry
Peavy Forest Science Center
3100 SW Jefferson Way
Corvallis, OR 97331

Disclaimer: Content in this guide if for advising purposes and is a useful planning tool. However, departments may change their course offerings and schedule without notice. For that reason, students should check the online Schedule of Classes frequently for the most current course information.

https://classes.oregonstate.edu/

Please keep this guide up to date by reporting any broken links or information that has changed to Terina.McLachlain@oregonstate.edu.

Revised 5.26 for SUMMER/FALL 2026
Version: NR 3.0

Note: This Student Advising Guide reflects the NR 3.0 requirements for students who were prior to Summer 2025. Students admitted after Summer 2025 should refer to the NR 4.0 Student Advising Guide.

Contents

Welcome to the Natural Resources Program at OSU

Natural Resources students will acquire knowledge in biophysical sciences, social sciences, math and statistics. They will learn approaches that emphasize the interconnectedness of humans and the environment. In addition, students will develop a toolbox of resource management skills such as communication, collaboration, analysis, assessment and planning. They will explore the conservation of vital resources and the management of terrestrial and aquatic ecosystems. A disciplinary depth in a focused area is developed through a required specialization option. Students may choose from eleven pre-approved specialization options or create an individualized (student designed) specialization option.

The Natural Resources major is available at the OSU-Corvallis campus, the OSU-Cascades campus and online through OSU Ecampus. The Natural Resources major is an interdisciplinary program administered by the College of Forestry.

Natural Resources Undergraduate Program Learning Outcomes

Students who graduate with a BS Degree in Natural Resources from OSU will learn to integrate technical field or laboratory skills with analytical skills to solve critical natural resource problems. The curriculum is designed to help students acquire knowledge about a range of natural resource issues, work in interdisciplinary teams, and deal with social and political aspects of resource management. They should be able to communicate effectively, work collaboratively, assess their professional strengths and weaknesses, and be committed to continuous learning and professional development.

Specifically, they should be able to:

-Describe ecological processes, including human impacts that influence ecosystem change, natural succession, and the sustainability of natural resources.

-Characterize natural resources and be able to quantify at least one of these resources.

-Envision desired future conditions in an area to achieve a set of natural resource-related objectives, prescribe management actions needed to achieve those objectives, and evaluate success of these actions.

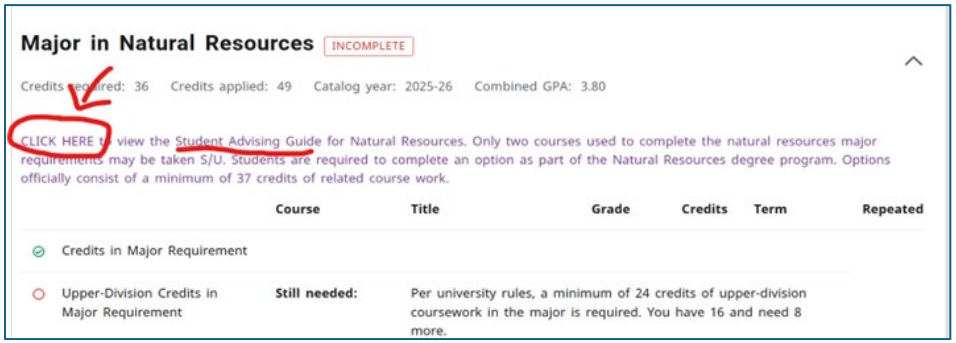
-Describe how the use, management, and allocation of natural resources are affected by law, policies, economic factors (both market and non-market), and characteristics (including demographic, cultural, ethnic and “values” differences) of private and public resource owners and users.

-Communicate effectively, orally and in writing, with audiences of diverse backgrounds.

-Work effectively with, and within, interdisciplinary and diverse groups to resolve management problems and achieve management objectives.

How to Use This Advising Guide

The Student Advising Guide is a road map to the completion of your degree. It lists all the requirements that you need to earn the degree and information to help you make choices along the way. Download a new copy each term to your desktop and read it carefully. Chances are you will find the answers to most of your questions in the Student Advising Guide! As a digital document it is searchable and has many helpful links to get you to other resources. Clicking on the BLUE course numbers will take you to the OSU Schedule of Classes where you will find the CRN number, course capacity, instructor's name, and other important information about each course. The guide is updated frequently and you can find the latest version on the Natural Resources Program Website, the College of Forestry Website, and through a link in your MyDegrees checklist (see image below).



*=Baccalaureate Core class
+ = Core Education class for those admitted in Summer 2025 and beyond
^= Writing Intensive Course
CORV = Corvallis Campus
ECMP = Ecampus
CASC = Cascades Campus

Technology and Tools

The Natural Resources Program Website is a repository of helpful information including FAQs, petition forms, and the most up to date version of this Student Advising Guide. Please take the time to explore and bookmark this website as you may be coming back to it frequently. Most of your questions can be answered through this website or the Student Advising Guide.

Make these pages favorites in your Beaver Hub:

OSU Catalog – The complete guide to OSU including academic regulations, degree programs, course information and more.
Academic Calendar – Important deadlines that you should be aware of each term!
Schedule of Classes – Searchable course schedules and descriptions and a quick way to register by adding classes to a "cart."

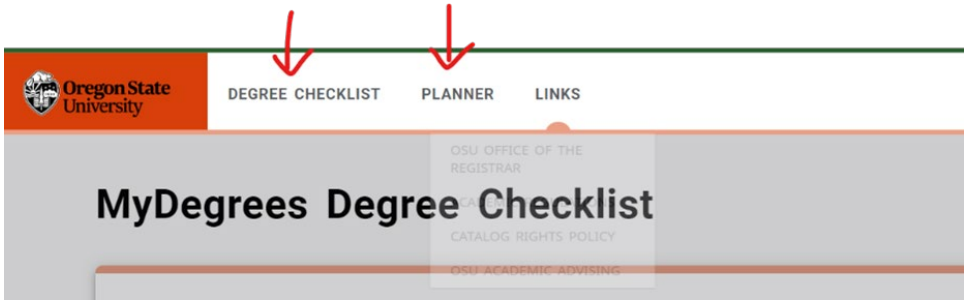
Resources and Tutorials – The Office of the Registrar has created several tutorials on using the registration system, withdrawing from classes, using MyDegrees and other helpful topics.
Beaver Hub portal – A one-stop login portal that connects you to all things OSU
How to register for Classes – Step by Step instructions on how to register for classes.

MyDegrees Checklist and Planner

Oregon State University uses an online degree audit system to help you track your progress toward your degree. The MyDegrees checklist will automatically apply approved OSU classes to requirements for the major. Some courses transferred from other institutions will need to be manually applied by your advisor. It is always a good idea to check to see how classes were applied in your MyDegrees checklist immediately after you register for classes each term. If you notice something is amiss, be sure to let your advisor know. You will find tutorials on how to use the MyDegrees checklist on the registrar's website.

The Planner tool is a feature that you and your advisor will use to plan your courses. You will use the MyDegrees Planner to input your courses for future terms. This helps us predict the need for courses in future terms and helps your advisor check to see if you are on the right track. We use this planner to help you build a customized academic program and facilitate a smooth path to graduation. You should be prepared to enter a plan for each term that you will share with your advisor prior to getting your registration hold lifted. You will work with your advisor to create a comprehensive plan for several terms in advance. This helps us catch any roadblocks to degree progression such as scheduling, prerequisites, and restrictions on registration. You can check out the Planner website for tutorials on how to use the great features of the planner tool. Be sure to take a double counting classes with Baccalaureate Core requirements into account when making your course choices and using the Planner! Review the chart of double counting classes in this advising guide for more information about courses that can double count.

The year in which you are admitted to the Natural Resources major will determine your "catalog year" and the requirements in effect in that year are applicable to your academic program and reflected in your MyDegrees checklist. Courses added to the curriculum in future years will not appear in your MyDegrees checklist. However, all course choices available to you are listed in the advising guide so check here often to see any new additions to the course lists. The Natural Resources curriculum is updated every summer with new courses and will be noted as "new" in the advising guide.



Academic Advising

The College of Forestry is committed to helping students succeed. Each student is assigned a professional academic advisor to assist with appropriate course selection, explain program options in line with student interests, and provide information about mentoring and other professional opportunities. In addition, academic advisors are a valuable resource for information and assistance regarding university rules and regulations, petitions, and referrals to university programs and resources. Your relationship with your professional academic advisor will be one of the most important in your college career. The advising effort is one of mutual respect and collaboration between you and your advisor. If the process is to be effective both you and your advisor must meet certain obligations. With that in mind, here are some key responsibilities for your relationship.

As an advisee, you should:
- Understand and accept that you are ultimately responsible for your education and your own decisions
-Be proactive about planning your academic program and connecting with your advisor well before the term registration begins to get your registration hold removed.
-Be prepared when you come to advising sessions. Be active in your advising session and ask questions when you have them.
-Provide accurate and truthful information when being advised.
-Initiate a purposeful relationship with your advisor and make appointments when necessary or when in need of assistance.
-Keep your contact information in your Student Online Services profile up to date and regularly checking your OSU mail.
-Use only your OSU email (@oregonstate.es) account to correspond with your advisor and include your student ID# in every correspondence.
-Cancel appointments through the online appointment system when you are unable to make them.
-Learn and understand OSU's policies, procedures, and requirements as they relate to your academic success and/or degree completion.
-Follow through plans-of-action identified during advising sessions.

Advisors 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 education, career and life plans.
-Provide timely and accurate educational information.
-Promote learning opportunities that will help students define or meet personal goals.
-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 students of campus resources that can enhance or supplement their academic or personal experience.

Make an advising appointment

One of the key actions for academic success is having regular appointments with your academic advisor. Many roadblocks to success and opportunities for enrichment are discovered through a meeting with your advisor. You can schedule an appointment through the Beaver Hub. You will receive email reminders about your appointment, and you can opt in for text reminders. If you can't attend your scheduled appointment, please cancel the appointment so other students can use that time or let your advisor know that you need to cancel. If you have any problems with scheduling an appointment, please contact your advisor through email.

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Registering For Classes

Each term a registration hold will be placed on your account and will need to be removed before you can register for classes. You should plan ahead and not wait until the last minute to get your hold removed. Advisor schedules can fill up quickly and a very high volume of email during registration time can delay getting your registration hold removed and cause you to register late. The procedure for removing the registration hold is outlined below:

OPTION 1 – FAST PASS: You may request an Advising Hold removal from you advisor via email without an appointment if you meet the following criteria…

a. You are not in your first year at OSU.

b. You are in good academic standing.

c. You have an up-to-date plan in your MyDegrees Planner.

NOTE: Your advisor may ask you to schedule an advising appointment if you do not meet the FAST PASS criteria, if there are other outstanding tasks that you have not completed, or if they have questions for you that require a conversation.

You are always welcome to make an appointment with your advisor at any time. Fast Pass is not a requirement. It is just an option if you feel confident in your course choices and have a solid plan in place.

If you are requesting a Fast Pass for having the Advising Hold lifted:

1. Use the advising guide and your MyDegrees checklist to choose classes to fulfill your remaining requirements. It is always advisable to have a couple of "back-up" classes in case your first choices fill up before you can register. Remember you can waitlist a class if it fills before you have a chance to register. Be sure to check prerequisites and get overrides well in advance of registration.

2. Add your chosen classes to the MyDegrees Planner.

3. Email your advisor to let them know your planner is ready to review. It is helpful to include your chosen classes and what requirement you want them to fulfill in the email as well. Be sure to always include your student ID# and use your OSU email account when corresponding.

4. After reviewing your plan your advisor will lift the registration hold.

OPTION 2 – ADVISING REGISTRATION HOLD LIFTED THROUGH AN APPOINTMENT: You are required to make an appointment with your advisor to get your Advising Registration hold lifted if you meet one of the following criteria…

a. You are in your FIRST year at OSU.

b. You are NOT in good academic standing.

c. You do not have an up-to-date plan in your MyDegrees Planner.

If you are requesting an appointment to get your Advising Hold lifted, please come prepared in order to use your time most efficiently.

1. Use the advising guide and your MyDegrees checklist to choose classes to fulfill your remaining requirements. It is always advisable to have a couple of "back-up" classes in case your first choices fill up before you can register. Remember you can waitlist a class if it fills before you have a chance to register. Be sure to check prerequisites and get overrides well in advance of registration.

2. Add your class choices to the MyDegrees Planner.

3. Make a list of any questions you may have for your advisor.

Your assigned registration day and time: You can find your priority registration assigned day and time in Beaver Hub by searching under "Academics" for "Check Your Registration Status". Note that registration times are always shown as Pacific Standard Time Zone. Assigned registration day and times for the next term are generally available by week 5 of the current term. Students can register for up to 19 credits. You must have at least 6 credits for part-time financial aid and a minimum of 12 credits for full-time financial aid. Waitlisting courses is available throughout registration if a class fills up before you can register. Students are assigned a registration day and time in fall, winter and spring terms based on their class level and total earned/in progress credits including transfer credits. Summer term registration opens for everyone on the same day with no assigned times. Registration restrictions such as campus, class standing or major will be removed on Monday of week 10 of the current term. (Some major restrictions are never removed so check the Schedule of Classes for information on restrictions each term).

Class Standing	***Total Credits Earned (including transfer credits)***
Freshman	1-44
Sophomore	45-89
Junior	90-134
Senior	135 and more

*It is important to note that completion of the Natural Resources degree is not related to how many credits you have earned but whether you have met the content requirements of the degree and all University requirements such as 60 upper division credits.

We recommend that you use the Schedule of Classes to set up a registration cart for the term. This tool has advanced search features and all the information about classes in one handy spot. You create a "shopping cart" of classes that you want to register for and then submit the cart to the registration system. You can enter time restrictions and filter out classes that won't work with your schedule. It is a simple and easy to use tool!

Note: If you need to drop/withdraw from a class you will need to use the Register/Add/Drop method. See the tutorials on the Registrar's Resources and Tutorials webpage for video on how to drop or withdraw from a class.

Taking a term off

You may be "not registered" for 3 consecutive terms (not including summer term) and still be an active student. If you are a Degree Partnership student you are allowed 8 terms (not including summer) if you are taking classes at the community college rather than at OSU. If you plan to be gone longer than 4 terms you should take a Planned Educational Leave. If you become inactive you will need to apply for readmission and may be readmitted into a different version than your current academic program.

Transfer Students

Students interested in how a course has been articulated by OSU can find a single course search tool and other resources at Transfer Credit Central. The transfer course search tool uses a data base that is historical, so if no one transferred a course in the past, it will not be on the list and will need evaluation. Just because a class is not listed does not necessarily mean it will not be applicable to your degree. After Admissions has evaluated transfer courses, they will automatically be applied to your MyDegrees checklist if they have been previously evaluated by OSU. Classes that are electives or that have not been articulates as equivalent to an OSU course will show as LDT (lower division transfer) or UDT (upper division transfer). 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. In some cases, you will want to petition for a course to be applied by submitting a course substitution petition form. Talk to your advisor before submitting the petition to determine if the course would be allowed. Students attending Oregon Community Colleges can find course equivalency tables and transfer guides for the NR major to assist them in choosing courses. You can petition transfer courses to meet Baccalaureate Core requirements by submitting a Transfer Credit Reevaluation request and include a syllabus for review.

Post Baccalaureate Students

Students who have already earned a bachelor's degree in a different major will not need to complete the Baccalaureate Core requirements. You will need to complete one of the WIC (writing intensive course) courses that can double count in the NR major. The admissions department will not automatically articulate classes for Post Baccalaureate students and your advisor will need to request articulations for specific classes from a previous degree that can be applied to the Natural Resources requirements.

Degree Partnership with Oregon Community Colleges

The Degree Partnership Program (DPP) is a collaboration between OSU and our community college partners in Oregon and Hawaii that seeks to provide a flexible and affordable pathway for incoming and current students towards receiving a bachelor's degree. After admission into the DPP Program students can take classes at an Oregon community college while being concurrently enrolled at OSU. Credits are combined for financial aid purposes. We encourage

students to participate in the DPP as it is an efficient way to complete course requirements and save money. You will find Transfer Guides for the Oregon Community Colleges to help you with planning courses.

Overrides and Other Restrictions

Courses can be restricted to only allow certain appropriate student populations to enroll in the course. Restrictions can include prerequisite requirements, major/minor/option restrictions, campus and class standing restrictions. Online courses are restricted to "Ecampus students only" in the first two weeks of registration. These restrictions are usually removed on Monday of week 10 but in some cases are permanent which means Corvallis campus students cannot register for that section. Before beginning registration, verify that you clear all the restrictions on courses you intend to register for. Course restrictions are listed in the Schedule of Classes. Don't be caught off guard at the time of registration. In many cases, a prerequisite override may be warranted.

Seeking access to an undergrad course in the College of Forestry?

You may request an override for a College of Forestry class (FE, FES, FOR, NR, TRAL, WSE). Please complete one form per course. Requests are reviewed within 1-3 business days and results will be emailed to you. Submitting a request does not guarantee an override will be granted.

College of Forestry Override Request

Common overrides needed from other Colleges:

Biology/Zoology: Students who completed their 200-level equivalent series (transferred as BI LD2) 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 of C-. For prerequisite overrides based on transfer coursework or test scores, use the Integrative Biology Override Request Form. For other biology or zoology course issues or overrides, contact the integrative Biology office (ib@oregonstate.edu or 541-737-2993).

Math: Read through the information on common registration issues before contacting the Math Department for overrides. Some math sections are restricted to EOP students (09X sections) or INTO students (6XX sections) – only these student populations can register for these sections. For prerequisite overrides based on transfer coursework or test scores, use the Math Override Request Form. For other math issues and overrides, email mathplacement@oregonstate.edu.

Fish and Wildlife: A list of restrictions and how to pursue overrides can be found on the FW Registration and Overrides webpage. Most FW classes will require that you have completed a full year of BI 2XX or BI 370. If you have transferred a BI LD2 class or series you will need to get a prerequisite override for the FW classes that require the OSU Biology courses. NOTE: Students in their last term before graduation will need to go through their assigned academic advisor to request an override.

Botany: For override requests please complete the Botany Override Request Form. All other inquiries can be sent to botany.advising@oregonstate.edu.

REQUEST OVERRIDES WELL IN ADVANCE OF REGISTRATION OPENING SO YOU ARE NOT DELAYED IN GETTING THE CLASES THAT YOU NEED!

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. You can drop a class during the first full week of the term with no repercussion. You can withdraw from a class in week 2 through week 7. 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. You are only allowed 18 withdraws ("W") in your entire academic program. Every student is responsible for knowing academic regulations and for observing the procedures that govern their relations with Oregon State University.

How to Withdraw or Drop a Class

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.

Satisfactory/Unsatisfactory Grading

The Natural Resources program allows TWO Satisfactory/Unsatisfactory (S/U) graded courses to be applied to a major requirement or area of specialization. A maximum of 36 credits can be taken for an S/U grade in the general education requirements (Core Ed or Baccalaureate Core). You should familiarize yourself with this and other Academic Regulations. Advisors must approve a change a grading status to S/U so students should communicate with their advisors if they want to use this option. You will need to submit an online request to change the grading basis of a course. Check the Academic Calendar to confirm the deadline for submitting an S/U request each term.

Account Holds and Registration Errors

It can be very frustrating if you are trying to register for classes and discover that you have a hold on your account, or a registration error occurs. This roadblock is avoided by checking your MyDegrees checklist (the top block) for any registration holds prior to registration. Very often there are easy fixes to these issues so managing these issues ahead of time will prevent any last-minute panic.

Common Registration Errors How to check Registration Holds

Baccalaureate Core (General Education Requirements)

The Baccalaureate Core is a requirement for all OSU students admitted BEFORE Summer 2025. Students must complete course work in four areas: Skills, Synthesis, Perspectives, and a Writing Intensive Course. Post-Baccalaureate will only need to complete the Writing Intensive Course (WIC) requirement. Associate of Arts Oregon Transfer (AAOT) students need only complete the Synthesis and Writing Intensive Course requirements.

Your First 45 hours of OSU generated credits:

To support students' success in all courses, the following first-year Skills courses are to be taken and completed satisfactorily within the first 45 hours of OSU-generated credits:

- *Writing I (WR 121) with a C- or higher*
- *Mathematics*
- *Speech*

To prepare for the upper-division Writing Intensive Course in the major, the following Skills course is to be taken and completed satisfactorily within the first 90 hours of OSU-generated credits:

- *Writing II*

For transfer students with sophomore standing or above, Writing II and Speech must be completed within the first 45 hours of OSU-generated credits. These requirements apply to all students, whether full or part time.

It is highly recommended that you complete your Natural Resources requirements for math*, statistics, chemistry, and biology within your first year.

**Some students with little math background or who took math long ago may need to start with developmental courses such as MTH 065 and/or MTH 095. You might also try some free online tutorials to get your math skills up to speed. There are many sites available but one of the best is the Kahn Academy (www.kahnacademy.org.)*

NOTE: The tutoring modules in the ALEKS Math Assessment are an excellent way to refresh math skills prior to courses such as chemistry. If you have not had a math course recently, we strongly recommend completing the ALEKS assessment and working in the tutoring modules.

Baccalaureate Core Requirements

SKILLS

Writing I	4	WR 121z
Writing II	3	See OSU Catalog. Suggested: WR 362 and WR 227z can double count with Adv. Comm
Speech	3-4	COMM 111z, COMM 114, COMM 211, COMM 218z
Lifetime Fitness and Health	2	HHS 231
Lifetime Fitness and Health	1	HHS 241 or and PAC (Physical Activity Class)
Mathematics	4	MTH111z or fulfilled in major by MTH112z, MTH241, MTH 245 or MTH251z

PERSPECTIVES

Physical Science w/Lab	4-5	Can be fulfilled by Chemistry, Earth/Soil Science or Climate Science requirement in the NR Major Requirements.
Biological Science w/ Lab	4-5	Can be fulfilled by Biology requirement in the NR Major Requirements.
Physical or Biological Science w/ Lab	4-5	Can be fulfilled by Biology requirement in the NR Major Requirements.

Choose one class from each of the following five areas below. No more than two from the same department.

Western Culture	3-4	*See the OSU Catalog for course selections.* SUGGESTED: **AEC 253** (Double counts in Conservation Law Enforcement or Human Dimensions or Policy & Management Options)
Cultural Diversity	3-4	*See the OSU Catalog for course selections.* **ANTH 210** will double count in the Human Dimensions Option
Literature & Arts	3-4	*See the OSU Catalog for course selections.*
Social Processes and Institutions	3-4	*See the OSU Catalog for course selections.* SUGGESTED: **ECON 201z, AEC 250** will double count with the Economics requirement for the NR major. Used in an option: **AEC 122**, **ANTH 101**, **PS 201**, **SOC 204z**
Difference, Power and Discrimination	3-4	*See the OSU Catalog for course selections.* SUGGESTED: **FW 340, AG 201**, **GEOG 241, ENSC/GEOG 333**, **SUS 331** (these will double count in Ethics & Phil. Requirement). Used in the Conservation Law Enforcement Option: **SOC 312, HDFS 201**

Synthesis

Must be from two different departments

Contemporary Global Issues	3-4	SUGGESTED: **AEC 351**, **AEC/ECON 352**, **ANTH 482**, BOT 301, FE/FOR 456, **FES 365**, FES/NR 477, **FW 324, FW 325**, **FW 345**, **GEO 306, GEO 308**, **GEOG 300**, **GEOG 331**, **PHL 440, PHL/REL 443**, **SOC 480, SUS 350,** TRAL 357, **Z 349**
Science, Technology and Society	3-4	**FES 485** is required in the NR major.
WRITING INTENSIVE COURSE	3-4	CROP/SOIL/SUS 325, ENSC 321, FES 486, FW 497, FOR/FE 463, GEOG 323, PS 300, RNG 491, SOIL 395, WR 462

Do I need to take the ALEKS Math Placement Assessment?

- All first-year students must take the ALEKS Math Placement Assessment.
- All transfer and post-baccalaureate students newly admitted to OSU must take the ALEKS Math Placement Assessment, unless you have earned a C- or better in a college-level course equivalent to OSU's MTH 111z 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 Assessment is strongly recommended. Using Adaptive Learning Technology, ALEKS will direct you to learning modules that will provide a good refresher for math skills.

ALEKS Math Placement Assessment

SCORE	COURSE PLACEMENT
75% - 100%	MTH 251z: *+Differential Calculus
60% - 74%	MTH 112z: *+Precalculus II: Trigonometry MTH 241: *+Calculus for the Management and Social Science MTH 245: *+Mathematics for Management, Life and Social Science
46% - 59%	MTH 105z (was MTH 105]: *+Math in Society MTH 111z [was MTH 111]: *+Precalculus I: Functions
30% - 45%	MTH 103: Algebraic Reasoning
15% - 29%	MTH065: Elementary Algebra (take at a community college)
0% - 14%	If your score was below 15%, you did not place into any OSU Mathematics Course. You can use the ALEKS Learning Modules to improve your score or consider enrolling in a community college to take the appropriate prerequisite courses.

Double Counting Courses

A course may be double counted between the Baccalaureate requirements and the Natural Resources major requirements or Specialization Option. Courses may NOT be double counted within the NR major requirements and the Specialization Option. You may see that a course is listed as a choice in more than one requirement within the major and specialization but each requirement in these sections requires a unique class. You may need to let your advisor know where you want courses to be applied.

Courses are also allowed to be double counted in a minor, certificate or another major if allowed by the department that offers the credential. Some additional credentials that the Natural Resources major is often paired up with are the minor in Sustainability, Soil, Botany the GIS undergraduate certificate or the Sustainability or Education majors.

Courses that can double count with the Natural Resources major or Specialization

*= Baccalaureate Core ^ = WIC (Writing Intensive Course) + = Core Ed (for those students admitted in Summer 2025 and beyond)

Course #	**Course Name**	**NR requirement met** ***(Italics = Specialty Option)***	**Baccalaureate Core requirement that is also met by this course**
AEC 122+*	Introduction to Climate Change Economics and Policy	*Human Dimensions* *Policy and Management*	Social Process and Institutions
AEC 250+*	Introduction to Environmental Economics and Policy	Economics	Social Processes and Institutions
AEC 253*	Environmental Law, Policy and Economics	*Conservation Law Enforcement* *Human Dimensions* *Policy and Management*	Western Culture
AEC 351*	Natural Resources Economics and Policy	*Ecological Restoration* *Human Dimensions* *Policy and Management*	Global Issues
AEC/ECON 352*	Environmental Economics and Policy	*Ecological Restoration* *Human Dimensions* *Policy and Management*	Global Issues
AEC 353*	Introduction to Coastal and Marine Economics	*Ecological Restoration* *Human Dimensions* *Policy and Management*	Science, Technology and Society
AG 201+*	Indigenous Ecosystem Science of PNW Regions.	Ethics & Philosophy *Policy and Management*	Difference, Power and Discrimination
ANTH 101+*	Introduction to Anthropology	*Human Dimensions*	Social Process and Institutions
ANTH 210+*	Introduction to Cultural Anthropology	*Human Dimensions*	Cultural Diversity
ANTH 352+*	Anthropology, Health and the Environment	Ethics & Philosophy	Global Issues
ANTH 481*	Natural Resources and Community Values	Ethics & Philosophy	Science, Technology and Society
ANTH 482*	Anthropology of International Development	Ethics & Philosophy	Global Issues
BI 101+*	Environmental Biology: Ecology, Conservation, Global Change	Biology I	Biological Science

Course #	Course Name	NR requirement met *(Italics = Specialty Option)*	Baccalaureate Core requirement that is also met by this course
BI 103+*	Human Biology: Anatomy, Physiology and Disease	Biology III	Biological Science
BI 204+*	Introductory Biology I	Biology I	Biological Science
BI 205+*	Introductory Biology II	Biology II	Biological Science
BI 206+*	Introductory Biology III	Biology III	Biological Science
BI 221z+*	Principles of Biology: Cells	Biology I	Biological Science
BI 222z+*	Principles of Biology: Organisms	Biology II	Biological Science
BI 223z+*	Principles of Biology: Populations	Biology III	Biological Science
BOT 220+*	Introduction to Plant Biology	*Fish and Wildlife Conservation*	Biological Science
CH 221z+* (with CH 227z lab)	General Chemistry I	Chemistry	Physical Science
CH 222z* (with CH 228z lab)	General Chemistry II	*Ecological Restoration*	Physical Science
CLIM 201+*	Climate Science	Climate Science	Physical Science
CLIM 341+*	Snow, Smoke and Storms: Climate Change in the PNW	Climate Science	Science, Technology and Society
CROP/SOIL/SUS 325^	Ag and Environmental Predicaments: A Case Study Approach	Environmental Assessment and Planning	Writing Intensive Course (WIC)
CSS 205+*	Soil Science	Soil	Physical Science
ECON 201z+*	Introduction to Microeconomics	Economics	Social Processes and Institutions
ED 216+*	Purpose, Structure and Function of Ed in a Democracy	*Natural Resource Education*	Difference, Power and Discrimination
ED 219+*	Social Justice, Civil Rights & Multiculturalism in Education	*Natural Resource Education*	Difference, Power and Discrimination
ENSC 210+*	Environmental Earth Sciences	Earth or Soil Science	Physical Science
ENSC 321^	Environmental Case Studies	*Fish and Wildlife Conservation* *Policy and Management*	Writing Intensive Course (WIC)
ENSC/GEOG 333+*	Environmental Justice	Ethics and Philosophy	Difference, Power and Discrimination
ENT 300/ HORT330+*	Plagues, Pest and Politics	Political Issues	Science, Technology and Society
FES 240+*	Forest Biology	Forestry	Biological Science
FES 365*	Issues in Natural Resource Conservation	Social Issues	Global issues
FES 485*	Consensus and Natural Resources	Interdisciplinary Foundations	Science, Technology and Society
FES 486^	Public Lands Policy and Management	Natural Resource Policy	Writing Intensive Course (WIC)
FOR/FE 463^	Forest Policy and Regulation	Natural Resource Policy *Policy and Management*	Writing Intensive Course (WIC)
FW 324+*	Food from the Sea	*Natural Resource Education*	Global Issues
FW 325+*	Global Crises Resource Ecology	Social Issues	Global Issues

Course #	Course Name	NR requirement met *(Italics = Specialty Option)*	Baccalaureate Core requirement that is also met by this course
FW 340+*	Power and Justice in U.S. Natural Resource Management	Ethics and Philosophy	Difference, Power and Discrimination
FW 350+*	Endangered Species, Society and Sustainability	Political Issues *Fish and Wildlife Conservation* *Human Dimensions* *Policy and Management*	Science, Technology and Society
GEO 101+*	Earth Science	Earth/Soil Science	Physical Science
GEO 201+*	Physical Geology	Earth/Soil Science	Physical Science
GEO 202+*	Earth Systems Science	Earth/Soil Science	Physical Science
GEO 203+*	Evolution of Planet Earth	Earth/Soil Science	Physical Science
GEO 306+*	Mineral, Energy, Water and the Environment	Land and Water	Global Issues
GEO 307*	National Park Geology and Preservation	Land and Water	Science, Technology and Society
GEO 308*	Global Change and Earth Science	Land and Water	Global Issues
GEOG 102+*	Dynamic Planet	Land Science	Scientific Inquiry and Analysis
GEOG 201+*	Foundations of Geospatial Science and GIS	Spatial Analysis *Forest Ecosystems,* *Landscape Analysis* *Policy and Management*	Physical Science
GEOG 240*	Human Dimensions of Climate Change	Social Issues	Social Processes and Institutions
GEOG 241+*	Transforming Environmental Conflicts	Ethics & Philosophy	Difference, Power and Discrimination
GEOG 250+*	Land Use Planning for Sustainable Communities	Environmental Assessment and Planning *Human Dimensions* *Policy and Management* *Urban Forest Landscapes*	Social Processes and Institutions
GEOG 300+*	Sustainability for the Common Good	Social Issues *Human Dimensions* *Policy and Management*	Global Issues
GEOG 323^	Climatology	Climate Science	Writing Intensive Course (WIC)
GEOG 331+*	Population, Consumption and Environment	*Human Dimensions*	Global Issues
GEOG 350+*	Geographies of Risk, Vulnerability and Resilience	*Policy and Management*	Global Issues
HDFS 201+*	Contemporary Families in the US	*Conservation Law Enforcement*	Difference, Power and Oppression Foundations
HST 481*	Environmental History of the US	Ethics and Philosophy *Human Dimensions*	Science, Technology and Society
LEAD 262+*	Team and Organizational Leadership	*Natural Resource Education*	Social Processes and Institutions
MTH 112z+*	Elementary Functions	Mathematics	Mathematics
MTH 241+*	Calculus for Management, Life and Social Sciences	Mathematics	Mathematics
MTH 245+*	Mathematics for Management, Life and Social Sciences	Mathematics	Mathematics
MTH 251z+*	Differential Calculus	Mathematics	Mathematics
OC 201+*	Oceanography	Fisheries and Marine Science	Physical Science

Course #	Course Name	NR requirement met *(Italics = Specialty Option)*	Baccalaureate Core requirement that is also met by this course
OC 202+*	Introduction to Biological Oceanography	Fisheries and Marine Science	Physical Science
OC 333+	Oceans, Coasts and People ***Also scheduled as OC 203* which is <u>not</u> a Bacc Core class)***	Social Issues	Global Issues if taken as OC 333
PH 201+*	General Physics	*Forest Ecosystems*	Physical Science
PS 201+*	Introduction to American Government	*Policy and Management*	Social Processes and Institutions
PS 300^	Research Methods	*Policy and Management*	Writing Intensive Course (WIC)
PS 455*	The Politics of Climate Change	*Political Issues*	Global Issues
RNG 491^	Rangeland Management and Planning	Environmental Assessment and Planning *Forest Ecosystems* *Policy and Management* *Wildland Fire Ecology*	Writing Intensive Course (WIC)
SOC 204z+*	Introduction to Sociology	*Human Dimensions*	Social Process and Institutions
SOC 312*	Sociology of the Family	Conservation Law Enforcement	Difference, Power and Discrimination
SOC 480*	Environmental Sociology	Social Issues *Ecological Restoration* *Human Dimensions* *Policy and Management*	Global Issues
SOC 481*	Society and Natural Resources	Social Issues *Ecological Restoration* *Policy and Management* *Urban Forest Landscapes*	Science, Technology and Society
SOIL 205+* (w/ lab of SOIL 205 or FOR 206)	Soil Science	Earth/Soil Science	Physical Science
SOIL 395^	World Soil Resources	Terrestrial Ecosystems	Writing Intensive Course (WIC)
SUS 103+*	Intro to Climate Change	Climate Science	Physical Science
SUS 304*	Sustainability Assessment	Environmental Assessment and Planning	Science, Technology and Society
SUS 331+*	Sustainability, Justice, and Engagement	Ethics and Philosophy *Ecological Restoration* *Human Dimensions* *Policy and Management*	Difference, Power and Discrimination
SUS 350+*	Sustainable Communities	Environmental Assessment and Planning	Global Issues
TRAL 357*	Parks and Protected Areas Management	*Conservation Law Enforcement* *Natural Resource Education*	Global Issues
WR 227Z+*	Technical Writing	Adv Communication	Writing II
WR 362+*	Science Writing	Advanced Communication *Conservation Law Enforcement*	Writing II
WR 462^	Environmental Writing	Advanced Communication	Writing Intensive Course (WIC)
WSE 385*	Evaluating Sustainability through Life Cycle Analysis	Env Assessment and Planning	Science, Technology and Society

Course #	**Course Name**	**NR requirement met** ***(Italics = Specialty Option)***	**Baccalaureate Core requirement that is also met by this course**
Z 102+*	Animal Biology: Genes, Behavior and Evolution of Life	Biology II	Scientific Analysis and Inquiry
~~Z 349~~* No longer taught	~~Biodiversity: Causes, Consequences and Conservation~~	~~*Ecological Restoration, Fish and Wildlife Conservation, Forest Ecosystems, Natural Resource Education*~~	~~Global Issues~~

Natural Resources Accelerated Masters Platform

You can get a jumpstart your Master of Natural Resources (MNR) while finishing your undergraduate degree in Natural Resources!

The Accelerated Masters Platform (AMP) allows undergraduate OSU Natural Resources students to take graduate level courses that will be applied to their B.S. degree and transfer those courses to OSU's Master of Natural Resources program. Students apply to the AMP program after completing 105 credits in their undergraduate degree program and then, if accepted, matriculate into the master's program immediately after graduation. Up to 22 graduate credits can be transferred and with careful planning full-time students could complete a master's degree within 1 year of finishing their bachelor's degree. Financial aid is applicable to the graduate level courses that are taken for the undergraduate degree.

The Master of Natural Resources degree is currently offered through Ecampus only.

Who is eligible for the AMP program?

All Natural Resources undergraduate students can apply if they meet the admission criteria. Unfortunately, the AMP program is not open to Post Baccalaureate students at this time.

What are the admission criteria?

Applicants must have a cumulative GPA of at least 3.25 or above and have completed 105 credits in their undergraduate program. Applicants should also complete the WIC course for the Natural Resources B.S. before applying to the Accelerated Masters Platform.

How do I apply?

The first step is to meet with the AMP Program Coordinator (Terina McLachlain). The program coordinator will help you prepare your application materials which includes a completion plan for the undergraduate degree. The completion plan also identifies the graduate level courses that will be taken to meet requirements for both the undergraduate degree and the Masters. The student's readiness for graduate level work will be evaluated and approved by the Natural Resources undergraduate academic advisor, the AMP Program Coordinator and the Graduate Faculty Advisor. It will be the applicant's responsibility to find the Graduate Faculty Advisor who will agree to mentor the student through both the AMP and the MNR academic programs. The deadline to submit the application is 3 terms prior to anticipated graduation from the undergraduate degree. However, submitting your application at least 6 terms prior to graduation is preferred as it will allow you to use the most of the 22 allowable graduate credits. No GRE is required for AMP students and the graduate school admission fee is waived.

How do I find a graduate faculty advisor?

A list of possible faculty advisors will be provided but any OSU faculty member could potentially serve as a graduate faculty advisor if they are willing to do so. Students will reach out personally or through email to request a faculty member as an advisor. Applicants should find an advisor who has an area of research and expertise that is relevant to the student's proposed research or project.

What requirements do I need to meet to stay in the AMP program?

- All graduate level coursework to be applied to the MNR must be 3.0 or better.

- Students must maintain a cumulative 3.0 GPA in their undergraduate program to remain in the program.

Are there required classes in the Accelerated Master's Program?

AMP students will be required to take MNR 560 Master's Case Study in place of NR 455 NR Decision Making (4 credits) as the capstone course for the Natural Resources undergraduate program. Additionally, they will be required to take FES 585 Consensus and Natural Resources (3 credits) which will replace FES 485 in the Interdisciplinary Foundations block of the undergraduate program. Other suggested courses are FES 545 Ecological Restoration (3 credits) and FES 586 Public Lands Policy and Management (3 credits). Many other graduate level courses can be applied to the undergraduate major requirements.

In preparation for courses in the MNR program AMP students should take the 2XX series of biology or an equivalent transferable biology series for science majors. In most cases they should have also completed BI 370 General Ecology or an equivalent and ST 351 Statistical Methods. Careful planning will ensure that any prerequisite courses for graduate level courses will be taken as an undergraduate.

Will I be automatically admitted to the MNR degree program when my bachelor's degree is finished?

In the final term of their Natural Resources B.S. degree program AMP participants will be invited to apply to the Master's of Natural Resources through a special application provided by the graduate school.

Who should I contact if I am interested in the AMP program?

AMP Program Coordinator Terina McLachlain
Email: terina.mclachlain@oregonstate.edu

Note: The Accelerated Masters Platform is a competitive program and not all who apply will be accepted.

Experiential Learning: Projects, Internships and Study Abroad

The Natural Resources program offers several ways for you to use experiential learning in your academic program. While not required, these credit-bearing opportunities provide valuable hands-on experience that can prepare you to work in your field and build your resume before you graduate. You can use up to 6 credits of related experiential learning in your area of specialization or another major requirement if petitioned and approved in advance. You should declare your specialization option before submitting a proposal for a project, internship, or study abroad credits that is related to your specialization. You will need to register for credits in the same term that you are actively working on the project, internship, or study abroad. For example, summer internships will require you to register for summer term. Experiential learning may encompass more than one term, but you would need to register for credits for each term in which you are actively engaged. Ideally, you should submit your proposal for your experiential learning credits at least TWO TERMS prior to the beginning of the term in which it occurs but minimally allow at least 1 month to get your proposal approved.

NR 406 Project

A project is appropriate for those students who are interested in gaining skills in a very specific academic area or conducting undergraduate research. You may design your own project, work on a project with an agency, non-profit or community organization or assist a faculty member with their research. A faculty mentor will supervise your project and provide a grade for the project at the end of the term. Finding the faculty mentor is the responsibility of the student but your academic advisor can point you toward resources to help with your search. (Note: You may also have a site supervisor depending on the nature of the project.) Projects can be graded on a Pass/No Pass or A-F grading basis. You will submit a proposal that includes a description of your project, the learning objectives, the final product that documents your learning (e.g. paper, website, site plan, display, poster, etc.) You will pay the typical tuition fee per credit as you would for any other credit-bearing class. If you are conducting undergraduate research you can apply to have that noted on your OSU transcript. One credit is equal to 30 hours of academic related work.

NR 410 Internship

An internship is similar to a project but may have a broader focus and include more general skills. Both internships and projects require defined learning objectives and a final academic project (e.g., research paper, blog, site plan, website, poster, display, project, etc.) An internship might be a seasonal job, field work or part-time work over an extended period. It is different from a project because a Site Supervisor is required as well as an OSU Internship Supervisor. The Site Supervisor will provide expertise in the field and an assessment of your work upon completion of the internship. The OSU Internship Supervisor will monitor your progress and assign the grade. Internships can be graded on a Pass/No Pass or A-F grading basis. You will submit a professionally written proposal that includes a description of your project, the learning objectives, and the final product that documents your learning. The research paper (or other

product or deliverable) will be graded by the OSU Internship Supervisor. You can find many internships and seasonal work positions posted on the College of Forestry Job Listings. One credit is equal to 30 hours of academic work.

Study Abroad

The College of Forestry International Programs organizes three types of opportunities abroad: Faculty-Led Programs, Exchange & Study Abroad and Internships & Research. These credit-bearing opportunities are eligible for university and college scholarships. Faculty-led programs are led by College of Forestry Faculty. These programs study a specific theme or focus, are eligible for academic credit and are usually shorter than the length of a term. Often, they are conducted during breaks such as summer or spring break. These are ideal for working students or Ecampus students who would like a short-term hands-on intensive experience. Exchange programs are typically a semester or academic year and integrates into a host university's academic and student community. Study abroad programs vary in duration and focus and can include intensive language or field studies for single and multiple terms abroad. International internships allow students to pursue professional level work experience overseas while receiving academic credit. Most international internships are a minimum of ten weeks in duration and can take place any time of the year. The College of Forestry and partner programs offer internships all over the world! In addition, OSU Global Opportunities has a wide range of programs and scholarship offering.

Schedule an appointment with the College of Forestry International Programs office through your Beaver Hub Success Team to discuss which opportunity would best fit your goals and schedule. Planning early is key to a successful international experience.

Rachael Fahrenbach
Director, International Programs
Rachael.fahrenback@oregonstate.edu
541-737-4601
Semester Exchange and Internships

Michael Goschie
Administrative Program Assistant
Michael.goschie@oregonstate.edu
541-737-7738
Faculty Led Programs

NATURAL RESOURCES MAJOR REQUIREMENTS

INTERDISCIPLINARY FOUNDATIONS

(13 credits) ALL REQUIRED

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
NR 201+	Managing NR for the Future	3	F, W	U, F, W, S	F	Core 100 or CORE 300. May be taken concurrently. Post Bacc students may request a prerequisite override.	Prerequisites are waived for those admitted prior to Summer 2025 with Baccalaureate Core or Post Bacc Students. Must submit override request here.
NR 202	NR Problems and Solutions	3	F, W	U, F, W, S	W	Recommend NR 201.	
FES 485*	Consensus and NR	3	F, W, S	U, F, W, S	S		Upper class standing. This class has significant group work and should be taken toward the end of your academic program and BEFORE NR 455.
NR 455+	Natural Resource Decision Making	4	W, S	U, F, S	W	(NR 201, FE 007, FOR 007 or WSE 007) and (FES 485 or 485H) and one of the following WIC: (BI 371, 373, ENSC 479, 321, FE 460, 463, FES 486, FW 435, FOR 460, 463, FW 439, 454, 497, GEOG 323, HORT 318, SOIL 395, WR 462, CROP 325, SOIL 325 or SUS 325).	Senior Standing. This class has significant group work. Should be taken in the last year of your academic program. NO SUBSTITUTES.

ADVANCED COMMUNICATION

(6-8 credits) Select ONE course from the following:

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
AGCM 351*	Communicating Global AG & NR Issues	3		U, F			
COMM 222+	Small Group Communication	3					Not currently scheduled.
COMM 226+	Intercultural Communication+	3	W	U, F	F	CORE 100*, 300*, BA 100*, 300*, ED 100*, 300*, LA 100*, 300*, SCI 100*, 300*, ENGR 110*, 110H*, 310* or minimum score of 1 in 'Baccalaureate Core Student'. * May be taken concurrently.	Formerly COMM 326.
COMM 324	Communication in Organizations	3	F				
COMM 328	Nonverbal Communication	3					Not currently scheduled.
COMM 385	Communication in Cyber Space	3		U, F, S			
COMM 440	Theories of Conflict and Conflict Management	3			S	Recommend COMM 321	
COMM 442	Bargaining and Negotiation Processes	3				Recommend COMM 321	Not currently scheduled.
FES 430	Forest as Classroom	4		F, S			
GEOG 453	Effective Communication of Environmental Change Science	3	F				

NR 312	Critical Thinking for NR Challenges	3					Not currently scheduled.
TRAL 493	Environmental Interpretation	4	S	U, F, W			
WR 227z+*	Technical Writing	4	F, W, S	U, F, W, S	F, W, S	WR 121Z or minimum score of 1 in 'Exam for Waiver - WR 121'. Minimum C-.	
WR 323+*	Adv Writing and Argumentation	3	F, W, S	U, F, W, S	F, W	WR 121Z or minimum score of 1 in 'Exam for Waiver - WR 121'. Minimum C-.	
WR 362+*	Science Writing	3	F, W, S	U, F, W, S		WR 121Z or minimum score of 1 in 'Exam for Waiver - WR 121'. Minimum C-.	
WR 462^	Environmental Writing	4		U, F, W, S		WR 121Z with minimum C-.	

WRITING INTENSIVE COURSE

(3-4 credits) A WIC course may double count within the Major and Specialization requirements.
Select ONE course from the following:

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
CLIM 323^*	Climatology	4	F	W, S		GEOG 102, GEO 202, 202H, 221, 221H, ATS 201, CLIM 201, OC 201 or 201H. A minimum grade of D- is required in GEOG 102, GEO 202, GEO 202H, GEO 221, GEO 221H, ATS 201 and CLIM 201. A minimum grade of C- is required in OC 201 and OC 201H.	Formerly GEOG 323.
CROP/SOIL/ SUS 325^	AG and Environmental Predicaments	3					Not currently scheduled.
ENSC 321^	Environmental Case Studies	3	F, W, S	U, F, W, S	W	Recommend WR 121 and one year of college bio; critical thinkings, problem solving and writing skills	
FES 486^	Public Lands Policy and Management	3	F, S	U, F, W, S	W		Sophomore standing recommended.
FOR/FE 463^	Forest Policy and Regulation	3	F, W				No Freshman/Sophomore.
PS 300^	Research Methods	4	F, W, S	U, F, W, S			
RNG 491^	Rangeland Management and Planning	4				RNG 341	Not currently scheduled.
SOIL 395^	World Soil Resources	3		F, S		CH 121 or CH 201 or CH 221z or CH 231	
WR 462^	Environmental Writing	4		F, W, S		WR 121Z with minimum C-.	

BIOPHYSICAL SCIENCES

BIOLOGY

(12-15 credits minimum with labs.)
NOTE: COMPLETION OF FULL 200 LEVEL SERIES (biology for science majors) IS PREFERRED AND IS REQUIRED FOR MOST AREAS OF SPECIALIZATION IN THE NATURAL RESOURCES MAJOR. Students who take the BI 1XX series will be limited in their choices for their specialization and courses. For example, a

student would only be able to choose RNG 121 or FES 341 Forest Ecology for the Ecology requirement. If choosing FES 341 they MUST take FES 240 Forest Biology as their Terrestrial Ecosystems class as this is the prerequisite to FES 341 Forest Ecology. BI 370 is a required prerequisite for many Fish & Wildlife, Zoology, Botany, and Forestry classes. You must take the BI 2XX series if you need BI 370 General Ecology for your specialization. Specializations that require BI 370: Ecological Restoration, Environmental Disaster Management, Fish and Wildlife Conservation., Forest Ecosystems, Urban Forest Landscapes, Wildland Fire Ecology. Students interested in the Accelerated Masters Platform or graduate studies should also take one of the BI 2XX series. Students pursuing the NR Education Specialization who are also pursuing Oregon teacher/licensure for middle/high school science should take the BI 2XX series for Content Mastery to teach integrated science.

Select one GROUP of courses from the following:

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
GROUP 1							
BI 101+*	Environmental Biology: Ecology, Conservation, Global Change	4	U, F	F	F		
Z 102+*	Animal Biology: Genes, Behavior, and Evolution of Life	4	W	U, W	W		Formerly BI 102.
BI 103+*	Human Biology: The Human Body, Health and Disease	4	S	U, S	S		
GROUP 2							
BI 204+*	Introductory Biology I	5		F, W, S		Minimum grade C- to move on to BI 205 and BI 206.	Restricted to Ecampus only
BI 205+*	Introduction to Biology II	5		W, S		BI 204 (min C-) and CH 121 or 201 or (CH 221z [was CH 231] and CH 227z [was CH 261]) with D- or higher.	Restricted to Ecampus students only
BI 206+*	Introduction to Biology III	5		F, S		BI 204 (min C-) and CH 121 or 201 or (CH 221z [was CH 231] and CH 227z [was CH 261]) with D- or higher.	Restricted to Ecampus students only
GROUP 3							
BI 221z*	Principles of Biology: Cells	5	U, F		F	CH 121 or 201 or CH 221 or (CH 221z and CH227z [was CH 231&CH261]). Minimum grade of D- is required. Chem may be taken concurrently.	Corvallis and Cascades students only. Offered at some Oregon Community colleges.
BI 222z*+	Principles of Biology: Organisms	5	U, W		W	BI 221z and (CH 121 or 201) or (CH 221z and CH 227z [was CH 231 &CH 261]). Minimum grade of C- is required on BI 221. D- in remaining prerequisites.	Corvallis and Cascades students only. Offered at some Oregon Community colleges.
BI 223z*+	Principles of Biology: Populations	4	U, S		S	BI 221z and (CH 121 or 201) or (CH 221z and CH 227z [was CH 231 & CH 261]). Minimum grade of C- is required on BI 221. D- in remaining prerequisites.	Corvallis and Cascades students only. Offered at some Oregon Community colleges.

CHEMISTRY

(5 credits) Select ONE course from the following:

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
CH 121+		5	F, W	U, F, W, S	F	Working knowledge of HS Algebra, logarithms and scientific notations	Suggest you complete MTH 111z [was MTH 111] and/or take the ALEKS math placement test and work in the tutoring modules before taking this class if you have not had high school algebra or any math classes recently.
OR							
CH 221z*		5	F, W	U	F	CORV- Co-requisite of CH 227z lab. Hybrid with both campus and online components. Prerequisites of MTH 111z or MTH 112z or MTH 251z or MTH 252z or MTH 254 with C- or better (or ALEKS score of 60 or above. MTH may be taken concurrently.	Not a CORE ED Scientific Inquiry and Analysis class unless you take the on-campus lab course as well (CH 227z). **Lab for this course is not offered online. Ecampus students should take CH 121.** Formerly CH 231.
with CH 227z+*		1	U, F, W	Lab not offered online	F	Required Lab for CH 221z.	Formerly CH 261.

CLIMATE SCIENCE

(3-4 credits) Select ONE course from the following:

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
CLIM 201+*	Climate Science	4	F, W, S	U, F, W, S			
CLIM 323^	Climatology	4	F			Prerequisites: GEOG 102, GEO 202, 202H, 221, 221H, ATS 201, CLIM 201, OC 201 or 201H. A minimum grade of D- is required in GEOG 102, GEO 202, GEO 202H, GEO 221, GEO 221H, ATS 201 and CLIM 201. A minimum grade of C- is required in OC 201 and OC 201H.	
CLIM 341+*	Snow, Smoke and Storms: Climate Change Impacts in the Pacific Northwest	4					No freshman or sophomore. Not currently scheduled.
SUS 103+*	Introduction to Climate Change	4	F. W, S	U, F, W, S			

EARTH OR SOIL SCIENCE

(4 credits) Select ONE course from the following:

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
CSS 205+*	Soil Science	4		U, F, W, S			Course requires lab kit for additional fee, which must be purchased through the OSU Beaver Store. Order lab kit no later than the start date of the course. Textbook required.
ENSC 210+*	Environmental Earth Science	4	S	F	F		(Was GEO 221)
GEO 101+*	Planet Earth	4	F	U, W, S			
GEO 201+*	Physical Geology	4	F	W			
GEO 202+*	Earth Systems Science	4	W				
GEOG 102+*	Dynamic Planet	4	F	U, W			Was "Physical Geography"
SOIL 205+*	Soil Science	3	F, W, S		S	Co-requisite SOIL 206 or FOR 206	Must take the lab below concurrent with lecture and need both in order for it to meet the Core Ed Scientific Inquiry and Analysis requirement.
and FOR 206+*	Forest Soils lab for SOIL 205	1	S		S	Co-requisite for SOIL 205	
or SOIL 206+*	Soil Science Lab for SOIL 205	1	F, W, S		S	Co-requisite for SOIL 205	

ECOLOGY

(3-4 credits) Select ONE course from the following:

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
BI 351	Marine Ecology	3	W	F, W		BI 221/222/223 OR BI 204/205/206. A minimum grade of C- in all.	
BI 370	General Ecology	3	F, W, S	U, F, W, S	W	BI 221/222/223 or BI 221z/222z/223z OR BI 204/205/206. A minimum grade of C- in all.	***Required in some specialization options and a prerequisite for many courses in some areas!***
BOT 341	Plant Ecology	4	S	F, W, S		Recommend BOT 321 and BI 223	Fall Ecampus section restricted to BOT
FES 341	Forest Ecology	3	F, W	F, W, S	F	FES 240 or (BI 221/222/223) or (BI 204/205/206) or BI 370	Students who take the BI 1XX series MUST take FES 240 Forest Biology for the Forestry requirement in order to take FES 341Forest Ecology. BI 2XX series is the preferred biology for the NR major.

MATHEMATICS AND STATISTICS (8 credits)

MATHEMATICS

(4 credits) Select ONE course from the following:

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
MTH 112z+*	Elementary Functions	4	U, F, W, S	U, F, W, S	W, S	MTH 111z with C- or better or ALEKS placement test score of 60%	
MTH 241+*	Calculus for Management and Social Science	4	U, F, W, S	U, F, W, S	S	MTH 111z with C- or better or ALEKS placement test score of 60%	
MTH 245+*	Mathematics for Management, Life and Social Science	4	S	U, W, S	S	MTH 111z with C- or better or ALEKS placement test score of 60%.	
MTH 251z+*	Differential Calculus	4	U, F, W, S	U, F, W, S	U, F, W	MTH 112z with C- or better or ALEKS placement test score of 75%.	

NOTE: MTH 112z or MTH 241 or MTH251z is a required prerequisite for some electives in the Landscape Analysis specialization or the Certificate in GIS.

STATISTICS

(4 credits) Select ONE course from the following:

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
ST 243z+	Elementary Statistics	4	F, W, S	U, F, W, S	F, W	High School Algebra.	Students interested in pursuing the Landscape Analysis option or the Certificate in GIS should take ST 351 and MTH 112z or MTH 241 or MTH 251z in order to have the greatest choice of electives.
ST 351	Intro to Statistical Methods	4	F, W, S	U, F, W, S	F	High School Algebra with Statistics.	Students who plan to go on to graduate school should take ST 351.Students interested in pursuing the Landscape Analysis option or the Certificate in GIS should take ST 351 and MTH 112z or MTH 241 or MTH 251z in order to have the greatest choice of electives.

NOTE: ST351 is a required prerequisite for some electives in the Landscape Analysis specialization or the Certificate in GIS or for some range classes.

RESOURCE MANAGEMENT (15-21 credits)

ANIMAL IDENTIFICATION

(3-4 credits) Select ONE course from the following:

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
FES 412	Forest Entomology	3	S			BI 204 or BI 211 or BI 212 or BI 221 with C or higher and/or equivalent.	
FOR 210	Terrestrial Vertebrate Identification and Natural History	3	S	F, S		Recommend one term or year of introductory biology	This course requires mandatory independent 3-hour field trips that students complete each week of the term to hone their skills at identifying terrestrial vertebrates under field conditions.
FW 312	Systematics of Birds	3	F	W, S	W	BI 221z/222z/223z or BI 204/205/206 required. C- min in BI 221z and BI 204.	No Freshman
FW 316	Systematics of Fishes	3	S	U, W		BI 221z /222z/ 223z or BI 204/205/206, Min of C- in BI 221z and BI 204. Recommend FW315 as co-requisite or prerequisite.	No freshman.
FW 318	Systematics of Mammals	3	W	U, F, W, S		BI 211z/212z/213z or BI 221z/222z/ 223z or BI 204/ 205/206, Min of C- in BI 221z and BI 204. Min D- in remaining.	No freshman.
Z 365	Biology of Insects	4		S		(BI 211/212/213) or (BI 204/205/206) or (BI 221/222/223) with C- or better	
Z 473	Herpetology	4		F, S		BI 204/205/206 or BI 221z/222z/223z) with minimum grade of C-.	
Z 477	Aquatic Entomology	4			F	(BI 204/ 205/206) or (BI 221z/222z/223z) with C- or better,	Two required Saturday field trips. Exact dates depend on weather. Lecture and Lab. Offered in alternate years.

VEGETATION IDENTIFICATION

(3-4 credits) Select ONE course from the following:

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
BOT 321	Plant Systematics	4	S	U, F		Recommend BI 223.	Fall Ecampus section restricted to BOT.
BOT 425	Flora of the Pacific Northwest	3	S			Recommend BOT 321.	
BOT 461	Mycology	4	F	F, S		BI 221z/222z/223z or BI 204/205/206. Minimum grade of C- in all.	Fall Ecampus section restricted to BOT majors.
FES 241	Dendrology	3	F, S	U, F, S			
HORT 226	Landscape Plant Materials I: Deciduous Hardwoods & Conifers	4		F			Will be offered on different campus in alternating years: Even Fall – Ecampus, Odd Falls- Corvallis Campus
HORT 228	Landscape Plant Materials II: Spring Flowering Trees and Shrubs	4	S	S			Will be offered on different campus in alternating years. Odd springs- Ecampus, Odd Falls- Corvallis Campus
RNG 353	Wildland Plant Identification	4	F, S		F	Coursework in botany or rangeland sciences.	

FISHERIES AND MARINE SCIENCE

(3-5 credits) Select ONE course from the following:

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
BI 150	Introduction to Marine Biology	3	S				
BI 347	Oceans in Peril	3	F	S		BI 221/222/223 or BI 221z/222z/223z OR BI 204/205/206. A minimum grade of C- in all.	No Freshman.
BI 351	Marine Ecology	3	W	F, W		BI 221/222/223 or BI 221z/222z/223z OR BI 204/205/206. A minimum grade of C- in all.	
FW 302	Biology and Conservation of Marine Mammals	4		F, W, S		BI 221/222/223 or BI 204/205/206. Minimum C- in all.	
FW 323	Management Principles of Pacific Salmon in Northwest	3		U, F, W, S	S		
FW 426	Coastal Ecology and Resource Management	5		F (Hybrid)			Departmental Approval required. No Freshman and Sophomore. HMSC = Hatfield Marine Science Center.
FW 473	Fish Ecology	4	W	S		BI 370 and FW 315	
FW 481	Wildlife Ecology	4		U, S	S	BI 370 or BI 371	
OC 201+*	Oceanography	4	F, W	U, F, S			
OC 202+*	Introduction to Biological Oceanography	4	W			OC 201 with min C-.	
OC 332	Coastal Oceanography	3	W				

LAND AND WATER

(3-4 credits) Select ONE course from the following:

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
FE 430	Watershed Processes	4		W			No Freshman or Sophomore
FE 434	Forest Watershed Management	4	F			(CH 121 or CH201 or CH231) and (SOIL 205 or CSS 305 or CSS 205) and (MTH 241 or MTH 251). All with C minimum grade.	
FW 326	Integrated Watershed Management	3		U, F, W	W	FW 251 recommended	No freshman.
FW 456	Freshwater Ecology and Conservation	5	S	W, S		BI 370 or BI 371 required. Recommend 9 credits of upper division biological sciences.	
FW 479	Wetlands and Riparian Ecology	3		U, F, W		BI 370 or BI 371.	
GEO 306+*	Minerals, Energy, Water and the Environment	3	S	U, F, W			No Freshman or Sophomore.
GEO 307*	National Park Geology and Preservation	3	F	U, S			
GEO 308*	Global Change and Earth Sciences	3	F, S	U, W,			
GEOG 340*	Introduction to Water Science and Policy	3		U, W, S	F		
GEOG 440	Conflict, Cooperation, and Control of Water in the US	3	W	W			
GEOG 441	The World's Water	3	S				
RNG 455	Riparian Ecohydrology and Management	4	S	W	F		

SOIL 366	Ecosystems of Wildland Soils	3		U		SOIL 205 or CSS 205	
SOIL 388	Soil Systems and Plant Growth	4		F		SOIL 205 (and SOIL /FOR 206) or CSS 205 and (CH 121, CH 201, or CH 221z) and BOT 220 or (BI 204/205205) or BI 221z/222z/223z)	
SOIL 395^	World Soil Resources	3		F, S		CH 121 or CH 201 or CH 221z or CH 231	
SOIL 466	Soil Morphology and Classification	4		S		SOIL 205 or CSS 205	

FORESTRY

(3-5 credits) Select ONE course from the following:

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
FES 240+*	Forest Biology	4	F, S	U, F, S			
FES 341	Forest Ecology	3	F, W	F, W, S	F	FES 240 or (BI 221/222/223) or (BI 204/205/206) or BI 370	Students who take the BI 1XX series MUST take FES 240 Forest Biology for the Forestry requirement in order to take FES 341Forest Ecology. BI 2XX series is the preferred biology for the NR major.
FES 342	Forest Types of the Northwest	3		W	F		
FES/HORT 350	Urban Forestry	3		F, W, S		Foundational Horticulture or Forestry courses recommended.	
FES 440	Wildland Fire Ecology	3	W	W, S	S	Recommended for Juniors or Seniors with coursework in Ecology and Natural Resource Management, analytical, critical thinking and reasoning skills.	
FES 445	Ecological Restoration	4	F, S	U, F, W, S	S	Recommend BI 370	
FES 452	Biodiversity Conservation in Managed Forests	3	W	F, S		Recommend FES 240 or FES 341 or BI 370.	No freshman or sophomore.
FOR 346	Topics in Wildland Fire	3	S	W, S		Recommend coursework in forest biology or ecology such as FES 240 or FES 341	
FOR 441	Silviculture Principles	4	F	F		FES 240 **AND** FES 241 with C minimum in all.	

RANGE

(3-4 credits) Select ONE course from the following:

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
FES 440	Wildland Fire Ecology	3	W	W, S	S	Recommended for juniors or seniors with coursework in Ecology and Natural Resource Management, analytical, critical thinking and reasoning skills.	
FES 445	Ecological Restoration	4	F, S	U, F, W, S	S	Recommend BI 370	
FOR 346	Topics in Wildland Fire	3	S	W, S		Recommend coursework in forest biology or ecology such as FES 240 or FES 341	
RNG 341	Rangeland Ecology and Management	3		F, W, S	W	BI 221z/222z/22z3 or BI 204/205/206. Coursework in soil science and ecology; analytical, critical thinking and synthesis skills.	.
RNG 351	Range Ecology I - Grasslands	3		F		Recommend RNG 341	
RNG 352	Range Ecology II – Shrub lands	3		F		Recommend RNG 341	
RNG 421	Rangeland Restoration and Management	4		F		BI221z/222z/223z or BI 204/205/206. Recommend coursework in soils and ecology.	
RNG 441	Vegetation Monitoring and Analysis	4	F	F, S		BI 221z/222z/223z or BI 204/205/206. Recommend coursework in ecology.	
RNG 442	Rangeland-Animal Relations	4		W		BI 221/222/223 or BI 204/205/206 and RNG 341. Recommend coursework in soils and ecology.	
RNG 491^	Rangeland Management and Planning	4				RNG 341	Not currently scheduled.

WILDLIFE MANAGEMENT

(3-4 credits) Select ONE course from the following:

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
FW 251	Principles of Fish and Wildlife Conservation	3	W	U, F, W, S	F	Recommend one course in introductory biology.	
FW 451	Avian Conservation and Management	3	W	F, W		BI 370 or FW 321	
FES 452	Biodiversity Conservation in Managed Forests	3	W	F, S		Recommend FES 240 or FES 341 or BI 370.	No freshman or sophomore.
FW 458	Mammal Conservation and Management	4	S	F, S		BI 370 or FW 321.	
FW 481	Wildlife Ecology	4		U, S		BI 370 or BI 371	
Z 350	Animal Behavior	3	W, S	F, S		(BI 204, BI 205, and BI 206) or (BI 221z,222z, and 223z) A minimum grade of C- is required in all	

ENVIRONMENTAL ASSESSMENT AND PLANNING

(3-4 credits) Select ONE course from the following:

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
FES 445	Ecological Restoration	4	F, S	U, F, W, S	S	Recommend BI 370	
FW 462	Ecosystems Services	3		W, S		BI 370 or equivalent recommended.	
GEOG 250+*	Land Use Planning for Sustainable Communities	3					No longer offered online. Not offered on Corvallis campus in 26/27 AY
GEOG 451	Planning Principles and Practices for Resilient Communities	4	F	W		CE202, FE 257 or GEOG 260 with min C-	
GEOG /ENSC 452	Environmental Assessment	3	S			.	
NR 325	Scientific Methods for Analyzing Natural Resource Problems	3		F		MTH111, 111z (C- or better) or score of 60 in ALEKS Math Placement test.	
RNG 421	Rangeland Restoration and Management	4		F		BI 221/222/223 or BI 204/205/206 required. Recommend course work in soils and ecology.	
RNG 457	Habitat Analysis I: Habitat Use and Movement	3		F		FW 251, RNG 341 and MTH 241 and (ST 243z [was ST 201] or ST 351)	NR students who have not had MTH 241 can contact the instructor for an override of the MTH prerequisite. MTH 245 would be allowed.
RNG 491^	Rangeland Management and Planning	4				RNG 341	Not currently scheduled.
SUS 304*	Sustainability Assessment	4	F	U, F, W, S	W		
SUS/SOIL/ CROP 325^	AG and Environmental Predicaments: A Case Study Approach	3					Not currently scheduled.
SUS 350+*	Sustainable Communities	4	W, S	U, F, W, S	F		

TRAL 456+	Planning for Sustainable Recreation	4	W	W		TRAL 251 and (TRAL 132, FOR 111 or NR 201) with min C-.	
TRAL 457+	Planning for Sustainable Tourism	4	S			TRAL 251 and (TRAL 132, FOR 111 or NR 201) with min C-.	
WSE 385*	Evaluating Sustainability through Life Cycle Analysis	3		S			

SOCIAL AND POLITICAL DIMENSIONS (16-20 CREDITS)

ETHICS AND PHILOSOPHY

(3-4 credits) Select ONE course from the following:

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
AG 201+*	Indigenous Ecosystem Sciences in PNW Regions	3	F, S	U, F, W, S			(was AG 301)
ANTH 352+*	Anthropology, Health and Environment	3	F		S		
ANTH 477	Ecological Anthropology	4	F	U		Recommend 3 credits social science and Jr/Sr standing	
ANTH 481*	Natural Resources and Community Values	3	F(honors), W	U, F, W, S		Recommend 3 credits of social science	
ANTH 482*	Anthropology of International Development	4	S	U			
ENSC/GEOG 333+*	Environmental Justice		F, S	U, W	F, W, S		
FW 340+*	Multicultural Perspectives in Natural Resources	3	F, W	U, F, W, S			
GEOG 241+*	Transforming Environmental Conflicts	3	F	S			
HST 481*	Environmental History of the United States	4	W	U, F, S		HST 201, 202, 203 recommended	No Freshman or Sophomore.
NR 312	Critical Thinking for NR Challenges	3					Not currently scheduled.
NR 380	Nature in Literature over the Centuries	3					Not currently scheduled
PHL 440*	Environmental Ethics	3	S			Recommend PHL 205 and PHL 342 and PHL 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		One introductory-level science	Sophomore standing
SUS 331+*	Sustainability, Justice, and Engagement	3	W, S	F, W, S		Recommend completion of Difference, Power and Oppression course; collaboration, critical thinking and synthesis skills.	

NATURAL RESOURCES POLICY

(3-4 credits) Select ONE course from the following:

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
AEC 432	Environmental Law	4	S	S			
FES 486^	Public Lands Policy and Management	3	F, S	U, F, W, S	W		Sophomore standing recommended.
FOR 461	Forest Policy Analysis	3					Not currently scheduled.
FOR/FE 463^	Forest Policy and Regulation	3	F, W				No Freshman/Sophomore.
FW 415	Fish and Wildlife Law and Policy	3		F, W		Recommend PS 201 or other political science intro course.	
FW 422	Introduction to Ocean Law	3		F, S			
PS 473	U.S. Energy Policy	4	F	S			
PS 475	Environmental Politics and Policy	4	F	U, F, W	S (hybrid)		
PS 477	International Environmental Politics and Policy	4	S	U., F, S	S		

ECONOMICS

(4 credits) Select ONE course from the following:

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
AEC 250+*	Intro to Environmental Economics and Policy	4	S	U, F, W, S		MTH 111z or equivalent is recommended.	
ECON 201z+*	Introduction to Microeconomics	4	F, W, S	U, F, W, S	F, W	Recommend MTH 111z [was MTH 111]	

SOCIAL ISSUES

(3-4 credits) Select ONE course from the following:

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
BOT 301*	Human Impacts on Ecosystems	3	W			One year of biology or chemistry recommended.	Was BI 301.
FES 365*	Issues in Natural Resource Conservation	3		U, W	W		
FW 325+*	Global Crises in Resource Ecology	3		F, W, S			
GEOG 240*	Human Dimensions of Climate Change	3	W	S			
GEOG 241+*	Transforming Environmental Conflicts	3	F	S			
GEOG 300+*	Sustainability for the Common Good	3	F, W, S	U, F, W, S			No Freshman or Sophomore.
GEOG 430	Resilience-Based Natural Resource Management	3		S			
OC 333*	Oceans, Coasts and People	3	F	U, W		Recommend OC 201	Global Issues for Bacc Core if taken as OC 333.
or OC 203+	Oceans, Coasts and People	3	S				
SOC 381	Social Dimensions of Sustainability	4	W	W, S			
SOC 475	Rural Sociology	4			S		

SOC 480*	Environmental Sociology	4	F (hybrid)	U			No Freshman or Sophomore
SOC 481*	Society and Natural Resources	4	S	U, W, S			No freshman.
SUS 420	Social Dimensions of Sustainability	3		W			
TRAL 251	Recreation Resource Management	4	F	S	F, W		
TRAL 351	Outdoor Recreation on Public Lands	4	W	F, S		TRAL 251 with minimum of C-	
TRAL 353	Nature, Eco and Adventure Tourism	3	F	S	F		
TRAL 354	Communities, Natural Areas, and Tourism	3	W	F			
TRAL 357*	Parks and Protected Areas Management	3	F	S	F		
WGSS 440+*	Women and Natural Resources	3		U, W			

POLITICAL ISSUES

(3-4 credits) Select ONE course from the following:

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
ENT 300 / HORT330+*	Plagues, Pests and Politics	3	S	F, W, S			If ENT 300 is full check HORT 330 for openings. No Freshman or Sophomore.
FW 350+*	Endangered Species, Society and Sustainability	3		U, F, W	W	Recommend FW 251.	No Freshman or Sophomore.
PS 455*	The Politics of Climate Change	4		W			
PS 475	Environmental Politics and Policy	4	F	U, F, W	S (hybrid)		
PS 477	International Environmental Politics and Policy	4	S	U., F, S	S		

SPATIAL ANALYSIS

(4 credits) Select ONE course from the following:

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
CROP/ HORT 414	Precision Agriculture	4	S	S		Access to a computer with a valid Windows or Mac operating system is required for this course. Google Chromebooks will not be compatible with the required software.	
FE 257	GIS and Forest Engineering Applications	3	F, W	F			
FW 303	Survey of Geographic Information Systems	3					NOT a lab/skills class. Not currently scheduled.
GEOG 201+*	Foundations of Geospatial Science and GIS	4	F, W, S	U, F, W, S			
GEOG 360	Geoscience I: Geographic Information Systems and Theory	4	F, W, S	U, F, W, S	W		

SPECIALIZATION OPTIONS

Choosing an Area of Specialization

A specialty "option" is a required part of the Natural Resources major that allows the student to develop depth and focus in a particular area of natural resource management. Students may pursue any specialization, but some courses may only be offered on certain campuses or online. Students should plan their program to study carefully with their academic advisor. All specialization options must have a minimum GPA of 2.25.

All specialization options are required to have a minimum of 37 credits.

At least 20 of the credits in the option must be upper division credits (those are courses numbered 300-400)

You should declare your option by letting your advisor know your choice no later than your 4th term if you are full time and 98th term if you are part time.

Specializations Available:

Conservation Law Enforcement	Individualized Specialty Option (student designed)
Ecological Restoration	Landscape Analysis
Environmental Disaster Management	Policy and Management
Fish and Wildlife Conservation	Urban Forest Landscapes
Forest Ecosystems	Natural Resource Education
Human Dimensions	Wildland Fire Ecology

Conservation Law Enforcement

Requirement: Measurements (2-4 credits) CHOOSE ONE

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Advising Notes
FW 255	Field Sampling of Fish and Wildlife	3	F, S	U, F, W, S	S	Recommend WR 121 and familiarity with personal computers recommended.	Restricted to FWCS majors.
FW 328	Wildlife Capture and Immobilization	2					Not currently scheduled.

Requirement: Foundational Courses (16 credits) ALL REQUIRED

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
COMM 318	Advanced Interpersonal Communication	3	W			COMM 218+ or 218z+*	The prerequisite of 218z+* can be taken for the Comm requirement in Core Ed.
or COMM 226+	Intercultural Communication	3	W	U, F			Formerly COMM 326
or COMM 328	Nonverbal Communication	3					Not currently scheduled
FW 251	Principles of Fish and Wildlife Conservation	3	W	U, F, W, S	F	Recommend one course in Introductory biology	Corvallis campus restricted to FW majors.
SOC 241	Introduction to Crime and Justice	3	W	F, S			
TRAL 251	Recreation Resource Management	4	F	S	F, W		
WR 362+*	Science Writing	3	F, W, S	U, F, W, S		WR 121Z or minimum score of 1 in 'Exam for Waiver - WR 121'. Minimum C-.	

Requirement: Resource Management (6-9 credits) CHOOSE TWO

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
FES 452	Biodiversity Conservation in Managed Forests	3	W	F, S		Recommend FES 240 or FES 341 or BI 370.	No freshman or sophomore.
FW 426	Coastal Ecology and Resource Management	5		F (Hybrid)			Departmental Approval required. No Freshman or Sophomore. HMSC = Hatfield Marine Science Center. All majors welcome.
FW 451	Avian Conservation and Management	3	W	F, W		BI 370 or FW 321	
FW 458	Mammal Conservation and Management	4	S	F, S		BI 370 or FW 321.	
RNG 341	Rangeland Ecology and Management	3		F, W, S	W	BI 221z/222z/22z3 or BI 204/205/206. Coursework in soil science and ecology; analytical, critical thinking and synthesis skills.	
TRAL 357*	Parks and Protected Areas Management	3	F	S	F		

Requirement: Human Dimensions (3-4 credits) CHOOSE ONE

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
FW 340+*	Power and Justice in U.S Natural Resource Management	3	F, W	U, F, W, S			No Freshman or Sophomore. (was "Multicultural Perspectives in Natural Resources")
HDFS 201+*	Contemporary Families in the U.S.	3	F, W, S	U, F, W, S	F, S		
HDFS 444	Family Violence and Neglect	4	F, W, S	U, F, W, S	W	Recommend 6 credits of HDFS, SOC, PSY.	
PSY 360	Social Psychology	4	W, S	U, F, W, S	W	PSY 201 or 201z and PSY 202 or 202z. With minimum C- in both	
SOC 312*	Sociology of the Family	4		U, W			
SOC 381	Social Dimensions of Sustainability	4	W	W, S			
SOC 441	Criminology and Penology	4	F	S			No Freshman.
SOC 448	Law and Society	4				SOC 204 recommended.	Not currently scheduled.
SOC 449	Law, Crime and Policy	4	S				No Freshman.
SUS 420	Social Dimensions of Sustainability	3	S	F			

Requirement: Fisheries, Wildlife and Environmental Law (2-4 credits) CHOOSE ONE

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
AEC 253*	Environmental Law, Policy and Economics	4	F, W	U, F, W, S			
AEC 432	Environmental Law	4	S	S			
FW 341	Fish and Wildlife Law Enforcement	2					Restricted to students with the Conservation Law Enforcement Option, F&W Majors. Requires one weekend field trip in Corvallis Not currently scheduled.
FW 415	Fish and Wildlife Law and Policy	3		F, W		Recommend PS 201 or other political science intro course.	
FW 422	Introduction to Ocean Law	3		F, S			

Requirement: Electives SELECT A MINIMUM OF 9 CREDITS OF APPROPRIATE COURSWORK

Students will choose elective credits of appropriate coursework approved by an advisor from related field such as criminal justice, fish and wildlife, forestry, recreation, anthropology, sociology, psychology and natural resources

Note: Up to 6 credits of appropriate internships, projects or study abroad may be used to fulfill credit requirements as approved by petition.
Option Code: 787 **Total Credits:** 37 minimum
*=Baccalaureate Core / ^ =WIC (Writing Intensive Course) / + = Core Education (for students admitted Summer 2025 onward.)
CORV= CORVALLIS CAMPUS, CASC= CASCADES CAMPUS, ECMP = ECAMPUS - FALL = F, WINTER = W, SPRING = S, SUMMER = U

Ecological Restoration

Requirement: Measurements (3-4 credits) CHOOSE ONE

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
BI 375	Field Methods in Ecological Restoration	4			U	Full year of biology required: (BI 211 /212/213) or (BI 204/205/206) or (BI 221/222/223) all with C- minimum grade.	Taught in Bend in condensed summer term. This is a field-based course with multiple nights camping. Students responsible for some aspects of personal food costs, camping gear, and weekend lodging (OSU-Cascades Residence Hall is available). CORV and DSC students will need an override to register and all students will need to apply. Only 10 students are accepted. Talk to your advisor about application process.
BOT 440	Field Methods in Plant Ecology	4		U, S		Recommend an ecology course and statistics.	
NR 325	Scientific Methods for Analyzing Natural Resource Problems	3		F		MTH111 (C- or better) or score of 060 in ALEKS Math Placement test.	
RNG 441	Vegetation Monitoring and Analysis	4	F	F, S		BI 221z/222z/223z or BI 204/205/206. Recommend coursework in ecology.	

Requirement: Resource Economics (3-4 credits) CHOOSE ONE

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
AEC 351*	Natural Resources Economics & Policy	3	W	F, S		AEC 250 or ECON 201z. MTH111z is recommended.	
AEC/ECON 352*	Environmental Economics and Policy	3	F, S	U, F, W, S	W	AEC 250 or ECON 201z	
AEC 353*	Introduction to Coastal and Marine Resource Economics	3				MTH 111 and AEC 250 or ECON 201z. All with C- or above.	Not currently scheduled.
FOR 329	Forest Resource Economics I	4	W			ST 243z (was ST 201) or ST 351	
FOR 431	Economics and Policy of Forest Wildland Fire	4	S	S		AEC 250 or ECON 201z or FOR 330 with minimum C.	

Requirement: Ecological Restoration Foundations (25-27 credits) ALL REQUIRED

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
BOT 321	Plant Systematics	4	S	U, F		Recommend BI 223.	Fall Ecampus section restricted to BOT majors
or BOT 341	Plant Ecology	4	S	F, W, S		Recommend BOT 321 and BI 223	Fall Ecampus section restricted to BOT majors.
CH 122*	General Chemistry	5	W, S	U, F, W, S	W	CH 121 or CH 201 or CH 221z [was CH 231] with C- or better	

or CH 222z*	General Chemistry II	4	W	U	W	Co-requisite of CH 228z. Prerequisite of CH 221z [was CH 231] and CH 227z lab [was CH 261] with C- or better	
and CH 228z*	General Chemistry II Lab	1	U, W	Lab not offered online.	W	Required Lab for CH 222z (was CH 262)	
FES 445	Ecological Restoration	4	F, S	U, F, W, S	S	Recommend BI 370	
FW 479	Wetlands and Riparian Ecology	3		U, F, W		BI 370 or FW 321.	
or RNG 455	Riparian Ecohydrology and Management	4	S	W	F		
GEOG 451	Planning Principles and Practices for Resilient Communities	4	F	W		CE202, FE 257 or GEOG 260 with min C-	
or GEOG /ENSC 452	Environmental Assessment	3	S				
SOIL 366	Ecosystems of Wildland Soils	3		U		SOIL 205 or CSS 205	
or SOIL 388	Soil Systems and Plant Growth	4		F		SOIL 205 (and SOIL /FOR 206) or CSS 205 and (CH 121,CH 201, or CH 221z) and BOT 220 or (BI 204/205205) or BI 221z/222z/223z)	
or SOIL 466	Soil Morphology and Classification	4		S			

Requirement: Social and Ethical Considerations (3-4 credits) CHOOSE ONE

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
FES/HORT 350	Urban Forestry	3		F, W, S		Foundational Horticulture or Forestry courses recommended.	
FOR 431	Economics and Policy of Forest Wildland Fire	4	S	S		AEC 250 or ECON 201z or FOR 330 with minimum C.	
NR 312	Critical Thinking for NR Challenges	3					Not currently scheduled.
PHL 440*	Environmental Ethics	3	S			Recommend PHL 205 and PHL 342 and PHL 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		One introductory-level science course.	Sophomore standing
SOC 480*	Environmental Sociology	4	F (hybrid)	U			CORV section: No Freshman/sophomore Ecampus Section: No Freshman
SOC 481*	Society and Natural Resources	4	S	U, W, S			No freshman.
SUS 331+*	Sustainability, Justice, and Engagement	3	W, S	F, W, S		Recommend completion of Difference, Power and Oppression course; collaboration, critical thinking and synthesis skills.	

Requirement: Ecological and Natural Resource Electives (3-5 credits) CHOOSE ONE

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
BI 351	Marine Ecology	3	W	F, W		BI 221/222/223 OR BI 204/205/206. A minimum grade of C- in all.	
BOT 488	Environmental Physiology of Plants	3	W			Recommend one course in plant physiology or ecology	
FES 440	Wildland Fire Ecology	3	W	W, S	S	Recommended for Juniors or Seniors with coursework in Ecology and Natural Resource Management, analytical, critical thinking and reasoning skills.	.
or FOR 436	Wildland Fire Science and Management	4	F	F, W			
FES 452	Biodiversity Conservation in Managed Forests	3	W	F, S		Recommend FES 240 or FES 341 or BI 370.	No freshman or sophomore.
FOR 441	Silviculture Principles	4	F	F		FES 240 **AND** FES 241 with C minimum in all.	
FW 426	Coastal Ecology and Resource Management	5		F (Hybrid)			Departmental Approval required. No Freshman or Sophomore. HMSC = Hatfield Marine Science Center. All majors welcome.
FW 451	Avian Conservation and Management	3	W	F, W		BI 370 or FW 321	
FW 456	Freshwater Ecology and Conservation	5	S	W, S		BI 370 or BI 371 required. Recommend 9 credits of upper division biological sciences.	
FW 458	Mammal Conservation and Management	4	S	F, S		BI 370 or FW 321.	
FW 473	Fish Ecology	4	W	S		BI 370 and FW 315	
FW 481	Wildlife Ecology	4		U, S		BI 370 or FW 321	
RNG 341	Rangeland Ecology and Management	3	F, W	F, W, S	W	BI 221z/222z/22z3 or BI 204/205/206. Coursework in soil science and ecology; analytical, critical thinking and synthesis skills.	
RNG 421	Rangeland Restoration and Management	4		F		BI 221/222/223 or BI 204/205/206 required. Recommend course work in soils and ecology.	
SOIL 468	Soil Landscape Analysis	4		W		SOIL/CSS 466 (may be taken concurrently).	
~~Z 349*~~	~~Biodiversity: Causes, Consequences and Conservation~~	~~3~~					No longer taught. May sub BI 377
Z 423	Environmental Physiology	3	F	F, S	F	(BI 204/205/206) or BI 221z/222z/223z) AND (CH 123 or CH 233 and CH 263) and (CH229z or CH 263) All with C- or better.	

Note: Up to 6 credits of appropriate internships, projects or study abroad may be used to fulfill credit requirements as approved by petition.
Option Code: 663 **Total Credits:** 37 minimum
*=Baccalaureate Core / ^ =WIC (Writing Intensive Course) / + = Core Education (for students admitted Summer 2025 onward.)
CORV= CORVALLIS CAMPUS, CASC= CASCADES CAMPUS, ECMP = ECAMPUS - FALL = F, WINTER = W, SPRING = S, SUMMER = U

Fish and Wildlife Conservation

Requirement: Measurements (3-4 credits) CHOOSE ONE

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
BI 375	Field Methods in Ecological Restoration	4			U	Full year of biology required: (BI 211 /212/213) or (BI 204/205/206) or (BI 221/222/223) all with C- minimum grade.	Taught in Bend in a condensed summer term. This is a field-based course with multiple nights camping. Students responsible for some aspects of personal food costs, camping gear, and weekend lodging (OSU-Cascades Residence Hall is available). CORV and DSC students will need an override to register, and all students will need to apply. Only 10 students are accepted. Talk to your advisor about the application process.
FW 255	Field Sampling of Fish and Wildlife	3					Restricted to FWCS majors.
NR 325	Scientific Methods for Analyzing Natural Resource Problems	3		F		MTH111, 111z (C- or better) or score of 60 in ALEKS Math Placement test.	
RNG 441	Vegetation Monitoring and Analysis	4	F	F, S		BI 221z/222z/223z or BI 204/205/206. Recommend coursework in ecology.	

Requirement: Foundations of Fish and Wildlife Conservation (12 -1 4 credits) ALL REQUIRED

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
FES 342	Forest Types of the Northwest	3		W	F		
or FOR 111+	Introduction to Forestry	3	F, S	U, W			
FES 440	Wildland Fire Ecology	3	W	W, S	S	Recommended for juniors or seniors with coursework in Ecology and Natural Resource Management, analytical, critical thinking and reasoning skills.	
or FOR 346	Topics in Wildland Fire	3	S	W, S		Recommend coursework in forest biology or ecology such as FES 240 or FES 341	
or FOR 436	Wildland Fire Science and Management	4	F	F, W			
FES 452	Biodiversity Conservation in Managed Forests	3	W	F, S		Recommend FES 240 or FES 341 or BI 370.	No freshman or sophomore.
or FW 370	Conservation Genetics	4	W	U, F, W, S	W	BI 221z/222z/223z or BI 204/205/206 required. C- min in BI 221z and BI 204.	F
FW 251	Principles of Fish and Wildlife Conservation	3	W	U,F,W,S	F	Recommend one course in introductory biology.	

Requirement: Fish and Wildlife Biology (9-12 credits) CHOOSE THREE

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
FW 302	Biology and Conservation of Marine Mammals	4		F, W, S		BI 221z/222z/223z or BI 204/205/206. Minimum C- in all.	
FW 311	Ornithology	3	F	U, F, W, S	F	BI 221z/222z/223z or BI 204/205/206 required. C- min in BI 221z and BI 204.	No Freshman.
FW 315	Ichthyology	3	S	U, F, W, S		BI 221z/222z/223z or BI 204/205/206 required. C- min in BI 221z and BI 204.	No Freshman.
FW 317	Mammalogy	3	W	U, F, W, S		BI 221z /222z/ 223z or BI 204/205/206, Min of C- in BI 221z and BI 204.	Section 401 will be restricted to F&W majors. Section 400 open to Natural Resources.
FW 331	Ecology of Marine and Estuarine Birds	4		S		One year of introductory biology recommended.	No freshman or sophomore.
FW 473	Fish Ecology	4	W	S		BI 370 and FW 315	
FW 481	Wildlife Ecology	4		U, S		BI 370 or FW 321	
Z 423	Environmental Physiology	3	F	F, S	F	(BI 204/205/206) or BI 221z/222z/223z) AND (CH 123 or CH 233 and CH 263) and (CH229z or CH 263) All with C- or better.	
Z 473	Herpetology	4		F, S		BI 204/205/206 or BI 221z/222z/223z) with minimum grade of C-.	

Requirement: Habitat Management (6-9 credits) CHOOSE TWO

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
FES 445	Ecological Restoration	4	F, S	U, F, W, S	S	Recommend BI 370	
FW 326	Integrated Watershed Management	3		U, F, W	W	FW 251 recommended	No Freshman.
FW 426	Coastal Ecology and Resource Management	5		F (Hybrid)			Departmental Approval required. No Freshman or Sophomore. HMSC = Hatfield Marine Science Center. All majors welcome.
FW 456	Freshwater Ecology and Conservation	5	S	W, S		BI 370 or BI 371 required. Recommend 9 credits of upper division biological sciences.	
FW 479	Wetlands and Riparian Ecology	3		U, F, W		BI 370 or FW 321.	
FW/OC 434	Estuarine Ecology	4	F			BI 221z/222z/223z or BI 204/205/206. Minimum C- in all	Field Trip and fee not required for Ecampus Students.
RNG 341	Rangeland Ecology and Management	3		F, W, S	W	BI 221z/222z/22z3 or BI 204/205/206. Coursework in soil science and ecology; analytical, critical thinking and synthesis skills.	
RNG 455	Riparian Ecohydrology and Management	4	S	W	F		
SOIL 366	Ecosystems of Wildland Soils	3		U		SOIL 205 or CSS 205	

OR SOIL 388	Soil Systems and Plant Growth	4		F		SOIL 205 (and SOIL /FOR 206) or CSS 205 and (CH 121 or CH 221z) and BOT 220 or (BI 204/205205) or (BI 211/212/213) or BI 221/222/223)	
OR SOIL 466	Soil Morphology and Classification	4		S		SOIL 205 or CSS 205	

Requirement: Natural Resource Policy (3 credits) CHOOSE ONE

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
FES 486^	Public Lands Policy and Management	3	F, S	U, F, W, S	W		Sophomore standing recommended.
FW 350+*	Endangered Species, Society and Sustainability	3		U, F, W	W	Recommend FW 251.	No Freshman or Sophomore.
FW 415	Fish and Wildlife Law and Policy	3		F, W		Recommend PS 201 or other political science intro course.	

Requirement: Electives (3-4 credits) CHOOSE ONE

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
BI 347	Oceans in Peril	3	F	S		BI 221/222/223 or BI 221z/222z/223z OR BI 204/205/206. A minimum grade of C- in all.	No Freshman.
BOT 220+*	Introduction to Plant Biology	4	F	U, F, W			
BOT 321	Plant Systematics	4	S	U, F		Recommend BI 223.	Fall Ecampus section restricted to BOT majors
BOT 324*	Fungi in Society	3	F, W, S	U, F, W		One course in biological science.	
BOT 341	Plant Ecology	4	S	F, W, S		Recommend BOT 321 and BI 223	Fall Ecampus section restricted to BOT majors
BOT 461	Mycology	4	F	F, S		((BI 211 or 211H) and (BI 212 or 212H) and (BI 213 or 213H)) or (BI 204, 205 and 206) or ((BI 221 or 221H) and (BI 222 or 222H) and (BI 223 or 223H)). Min C- in all.	Fall Ecampus section restricted to Bot majors.
ENSC 321^	Environmental Case Studies	3	F, W, S	U, F, W, S	W	Recommend WR 121 and one year of college bio; critical thinking, problem solving and writing skills	
FW 323	Management Principles of Pacific Salmon in Northwest	3		U, F, W, S	S		
FW 366	Environmental Contaminants in F&W	3				(BI 204/205/206) or (BI 221z/222z/223z)	Not currently scheduled.
FW 371	Environmental Physiology of Fishes	4		W		Recommend FW 315 or one year of introductory biology, critical thinkings, problem solving and synthesis skills	No Freshman.

FW 421	Aquatic Biological Invasions	4		W		BI 221z/222z/223z or BI 204/205/206 required. C- min in BI 221z and BI 204.	
FW 427	Principles of Wildlife Diseases	4		F, W, S		BI 221z/222z/223z or BI 204/205/206 required. C- min in BI 221z and BI 204.	No Freshman or Sophomore.
FW 451	Avian Conservation and Management	3	W	F, W		BI 370 or FW 321	
FW 462	Ecosystems Services	3		W, S		BI 370 or equivalent recommended.	
FW 467	Antarctic Science	4					Not currently scheduled.
FW 469	Methods in Physiology and Behavior of Marine Megafauna	3		F (Hybrid + HMSC)		BI 221z/222z/223z OR BI 204/205/206 required. Recommend FW 302, FW 320, FW 331 and FW 475. Minimum C- in all. Dept Approval required. Contact fw.advising@oregonstate.edu.	Hybrid section; includes face-to-face meetings. Mandatory in-person attendance at HMSC in week prior to start of fall term. Remainder of coursework to be completed online. All majors welcome. Contact Instructor if issues co-registering for FW 426/526.
FW 475	Wildlife Behavior	4		F, W		BI 370 or FW 321	
NR 325	Scientific Methods for Analyzing Natural Resource Problems	3		F		MTH111 (C- or better) or score of 060 in ALEKS Math Placement test.	
OC 333*	Oceans, Coasts and People	3	F, S	U, W		Recommend OC 201	Global Issues for Bacc Core if taken as OC 333.
or OC 203+	Oceans, Coasts and People	3	S				
OC 340	Biological Oceanography	4	S			OC 201 and BI 221 with minimum C-.	Required field trip aboard ocean going vessel.
RNG 457	Habitat Analysis I: Habitat Use and Movement	3		F		FW 251, RNG 341 and MTH 241 and (ST243z [was ST 201] or ST 351)	NR students who have not had MTH 241 can contact the instructor for an override of the MTH prerequisite. MTH 245 would be allowed.
~~Z 349*~~	~~Biodiversity: Causes, Consequences and Conservation~~	~~3~~					No longer taught. May sub BI 377
Z 350	Animal Behavior	3	W, S	F, S			
Z 365	Biology of Insects	4		S		(BI 211/212/213) or (BI 204/205/206) or (BI 221/222/223) with C- or better	
Z 477	Aquatic Entomology	4			F	(BI 204/ 205/206) or (BI221z/222z/223z) with C- or better,	Two required Saturday field trips. Exact dates depend on weather. Lecture and Lab. Offered in alternate years.

Note: Up to 6 credits of appropriate internships, projects or study abroad may be used to fulfill credit requirements as approved by petition.
Option Code: 672 **Total Credits:** 37 minimum
*=Baccalaureate Core / ^ =WIC (Writing Intensive Course) / + = Core Education (for students admitted Summer 2025 onward.)
CORV= CORVALLIS CAMPUS, CASC= CASCADES CAMPUS, ECMP = ECAMPUS - FALL = F, WINTER = W, SPRING = S, SUMMER = U

Forest Ecosystems

Requirement: Measurements (4-5 credits) CHOOSE ONE

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
BI 375	Field Methods in Ecological Restoration	4			U	Full year of biology required: (BI 211 /212/213) or (BI 204/205/206) or (BI 221/222/223) all with C- minimum grade.	Taught in Bend in a condensed summer term. This is a field-based course with multiple nights camping. Students responsible for some aspects of personal food costs, camping gear, and weekend lodging (OSU-Cascades Residence Hall is available). CORV and DSC students will need an override to register, and all students will need to apply. Only 10 students are accepted. Talk to your advisor about the application process.
BOT 440	Field Methods in Plant Ecology	4		U, S		Recommend an ecology course and statistics.	
FOR 321	Forest Mensuration	5	F			FES 241 and FE 208 and (MTH 241, 245, 251 or 251H) and (ST243z [was ST 201], 314, 314H, 351 or 351H) with minimum grade of C required in all	

Requirement: Ecological Foundations (23 credits) ALL REQUIRED

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
FES 341	Forest Ecology	3	F, W	F, W, S	F	FES 240 or (BI 221/222/223) or (BI 204/205/206) or BI 370	Students who take the BI 1XX series MUST take FES 240 Forest Biology for the Forestry requirement in order to take FES 341Forest Ecology. BI 2XX series is the preferred biology for the NR major.
FES 412	Forest Entomology	3	S			BI 204 or BI 211 or BI 212 or BI 221 with C or higher and/or equivalent.	
FES 440	Wildland Fire Ecology	3	W	W, S	S	Recommended for juniors or seniors with coursework in Ecology and Natural Resource Management, analytical, critical thinking and reasoning skills.	
FES 452	Biodiversity Conservation in Managed Forests	3	W	F, S		Recommend FES 240 or FES 341 or BI 370.	No freshman or sophomore.
BOT/FOR 413	Forest Pathology	3	W			BI 204, BI 221z, BI 221, BI 213 or FES 240 with a minimum of C.	
FOR 436	Wildland Fire Science and Management	4	F	F, W			
FOR 441	Silviculture Principles	4	F	F		(FES 240 and FES 241 with C minimum in all.	

Requirement: Ecology Breadth (6-8 credits) CHOOSE TWO

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
BOT 321	Plant Systematics	4	S	U, F		Recommend BI 223.	Fall Ecampus section restricted to BOT majors
BOT 341	Plant Ecology	4	S	F, W, S		Recommend BOT 321 and BI 223	Fall Ecampus section restricted to BOT majors.
BOT 425	Flora of the Pacific Northwest	3	S			Recommend BOT 321.	
FE 434	Forest Watershed Management	4	F			(CH 121 or CH201 or CH231) and (SOIL 205 or CSS 305 or CSS 205) and (MTH 241 or MTH 251). All with C minimum grade.	
FES 445	Ecological Restoration	4	F, S	U, F, W, S	S	Recommend BI 370	
FW 251	Principles of Fish and Wildlife Conservation	3	W	U, F, W, S	F	Recommend one course in Introductory biology	Corvallis campus restricted to FW majors.
FW 311	Ornithology	3	F	U, F, W, S	F	BI 221z/222z/223z or BI 204/205/206 required. C- min in BI 221z and BI 204.	No Freshman.
FW 315	Ichthyology	3	S	U, F, W, S		BI 221z/222z/223z or BI 204/205/206 required. C- min in BI 221z and BI 204.	No Freshman.
FW 317	Mammalogy	3	W	U, F, W, S		BI 221z /222z/ 223z or BI 204/205/206, Min of C- in BI 221z and BI 204.	No Freshman. Section 401 will be restricted to F&W majors. Section 400 open to Natural Resources.
FW 451	Avian Conservation and Management	3	W	F, W		BI 370 or FW 321	
FW 456	Freshwater Ecology and Conservation	5	S	W, S		BI 370 or BI 371 required. Recommend 9 credits of upper division biological sciences.	
FW 458	Mammal Conservation and Management	4	S	F, S		BI 370 or FW 321.	
FW 473	Fish Ecology	4	W	S		BI 370 and FW 315	
FW 481	Wildlife Ecology	4		U, S		BI 370 or FW 321	
NR 325	Scientific Methods for Analyzing Natural Resource Problems	3		F		MTH111, 111z (C- or better) or score of 60 in ALEKS Math Placement test.	
RNG 351	Ecology of Grassland Ecosystems	3		F		Recommend RNG 341	
RNG 352	Ecology of Shrubland Ecosystems	3		F		Recommend RNG 341	
RNG 455	Riparian Ecohydrology and Management	4	S	W	F		
RNG 491^	Rangeland Management and Planning	4				RNG 341	Not currently scheduled.
SOIL 366	Ecosystems of Wildland Soils	3		U		SOIL 205 or CSS 205	
or SOIL 388	Soil Systems and Plant Growth	4		F		SOIL 205 (and SOIL /FOR 206) or CSS 205 and (CH 121 or CH 221z) and BOT 220 or (BI 204/205205) or (BI 211/212/213) or BI 221/222/223)	
or SOIL 466	Soil Morphology and Classification	4		S		SOIL 205 or CSS 205	
~~Z 349*~~	~~Biodiversity: Causes, Consequences and Conservation~~	~~3~~					No longer taught. May substitute BI 377.
Z 473	Herpetology	4		F, S		BI 204/205/206 or BI 221z/222z/223z) with minimum grade of C-.	

Requirement: Technical Electives (6-8 credits) CHOOSE TWO

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
FE 208	Forest Surveying	4	F, W, S	F, W, S		MTH 112 or MTH 241 or MTH 245 or MTH 251 or MTH 252 with C or better.	
FE 257	GIS and Forest Engineering Applications	3	F, W	F			
FE 370	Harvesting Operations	4	F			PH 201 or PH 211 with C or better.	
FE 444	Remote Sensing and Photogrammetry	4	F			FE 257 and (MTH 112z [was MTH 112] , 241, 251, 251H, 252 or 252H) and (PH 201 or 211). A minimum grade of C.	
FES/HORT 447	Arboriculture	4		F, S		Recommend (FES 241 or HORT 226 or HORT 228) and (FOR 111 or HORT 112)	
GEOG 201+*	Foundations of Geospatial Science and GIS	4	F, W, S	U, F, W, S			
GEOG 360	Geoscience I: Geographic Information Systems and Theory	4	F, W, S	U, F, W, S	W		
ST 351	Intro to Statistical Methods	4	F, W, S	U, F, W, S	F	High School Algebra with Statistics.	
or ST 352	Introduction to Statistical Methods	4	F, W, S	U, F, W, S	W	ST 351 or ST 351H	

Note: Up to 6 credits of appropriate internships, projects or study abroad may be used to fulfill credit requirements as approved by petition.
Option Code: 673 **Total Credits:** 37 minimum
*=Baccalaureate Core / ^ =WIC (Writing Intensive Course) / + = Core Education (for students admitted Summer 2025 onward.)
CORV= CORVALLIS CAMPUS, CASC= CASCADES CAMPUS, ECMP = ECAMPUS / FALL = F, WINTER = W, SPRING = S, SUMMER = U

Human Dimensions

Requirement: Measurements (4 credits) CHOOSE ONE

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
FES 422	Research Methods in Social Science	4	W	S		ST 243z or ST 351	

Requirement: Consensus and Communication (3 credits) CHOOSE ONE

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
COMM 222+	Small Group Communication	3				Recommend COMM 218z [was COMM 218].	Was COMM 322. Not currently scheduled.
COMM 226+	Intercultural Communication	3	W	U, F			Was COMM 326
COMM 324	Communication in Organizations	3	F				No Freshman.
COMM 440	Theories of Conflict and Conflict Management	3			S	Recommend COMM 321	
COMM 442	Bargaining and Negotiation Processes	3				Recommend COMM 321	Not currently scheduled
LEAD 262+*	Team and Organizational Leadership	3	W, S	W, S			
LEAD 443	Leadership through Conversations	3	F	S			

Requirement: Philosophy and Ethics of the Environment (6 credits) CHOOSE TWO

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
NR 312	Critical Thinking for NR Challenges	3					Not currently scheduled.
NR 380	Nature in Literature over the Centuries	3					Not currently scheduled.
PHL 440*	Environmental Ethics	3	S			Recommend PHL 205 and PHL 342 and PHL 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		One introductory-level science course.	Sophomore standing
PHL 470	Philosophy of Science	3				Recommend 6 credits of upper-division philosophy and sophomore standing.	Not offered every year. Not currently scheduled.
SOC 381	Social Dimensions of Sustainability	4	W	W, S			
SUS 331*	Sustainability, Justice, and Engagement	3	W, S	F, W, S		Recommend completion of Difference, Power and Oppression course; collaboration, critical thinking and synthesis skills.	

Requirement: Natural Resource Policy (3-4 credits) CHOOSE ONE

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
AEC 253*	Environmental Law, Policy and Economics	4	F, W	U, F, W, S			
AEC 432	Environmental Law	4	S	S			
PS/PPOL 475	Environmental Politics and Policy	4	F	U, F, W, S	S (hybrid)		

PS 477	International Environmental Politics and Policy	4	S	U., F, S	S		

Requirement: Resource Economics (3-4 credits) CHOOSE ONE

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
AEC 351*	Natural Resources Economics & Policy	3	W	F, S		AEC 250 or ECON 201z. MTH111z is recommended.	
AEC/ECON 352*	Environmental Economics and Policy	3	F, S	U, F, W, S	W	AEC 250 or ECON 201z.	
AEC 353*	Introduction to Coastal and Marine Resource Economics	3				MTH 111 and AEC 250 or ECON 201z. All with C- or above.	Not currently scheduled.
ECON 466	Economics of Traditional and Renewable Energy	4	W	F		ECON 201z	This course requires online proctored testing, which may include testing fees and the use of security measures, such as a scan of your testing environment. Please carefully review online proctor test information at: beav.es/proctoring
TRAL 432	Economics of Recreation and Tourism	3	S	S		Recommend AEC 250 or ECON 201z and ST 202 or 202H	

Requirement: Management Issues (9-11 credits) CHOOSE THREE

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
FES 365*	Issues in Natural Resource Conservation	3		U, W	W		
FES/HORT 455	Urban Forest Planning, Policy and Management	4		F, W		FES 350 or HORT 350 with minimum grade of C-	
FES 486^	Public Lands Policy and Management	3	F, S	U, F, W, S	W		Sophomore standing recommended.
FW 251	Principles of Fish and Wildlife Conservation	3	W	U, F, W, S	F	Recommend one course in Introductory biology	Corvallis campus is restricted to FW majors.
FW 326	Integrated Watershed Management	3		U, F, W	W	FW 251 recommended	No Freshman.
FW 350+*	Endangered Species, Society and Sustainability	3		U, F, W	W	Recommend FW 251.	No Freshman or Sophomore.
FW 462	Ecosystems Services	3		W, S		BI 370 or equivalent recommended.	
GEOG 250+*	Land Use Planning for Sustainable Communities	3					No longer offered online. Not offered on Corvallis campus in 26/27 AY
GEOG 430	Resilience-Based Natural Resource Management	3		S			
GEOG 451	Planning Principles and Practices for Resilient Communities	4	F	W		CE202, FE 257 or GEOG 260 with min C-	
GEOG /ENSC 452	Environmental Assessment	3	S				
NMC 311	Intro to Non-Profit Management	3		S			
TRAL 351	Outdoor Recreation on Public Lands	4	W	F, S		TRAL 251 with minimum of C-	
TRAL 354	Communities, Natural Areas, and Tourism	3	W	F			

Requirement: Social Issues (9-12 credits) CHOOSE THREE

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
AEC 122+*	Introduction to Climate Change Economics and Policy	3	F	U, F, S			
ANTH 101+*	Introduction to Anthropology	3	F, W, S	U, F, W, S			
ANTH 210+*	Introduction to Cultural Anthropology	3	F, W, S	U, F, W, S	F		
ANTH 477	Ecological Anthropology	4	F	U		Recommend 3 credits social science and Jr/Sr standing	
ANTH 481*	Natural Resources and Community Values	3	F(honors), W	U, F, W, S		Recommend 3 credits of social science	
FW 340+*	Multicultural Perspectives in Natural Resources	3	F, W	U, F, W, S			
GEOG 300+*	Sustainability for the Common Good	3	F, W, S	U, F, W, S			No Freshman or Sophomore.
GEOG 331+*	Population, Consumption and Environment	3		S			
HST 481*	Environmental History of the United States	4	W	U, F, S		HST 201, 202, 203 recommended	No Freshman or Sophomore.
OC 333*	Oceans, Coasts and People	3	F, S	U, W		Recommend OC 201	Not Bacc Core if taken as OC 203
or OC 203+	Oceans, Coasts and People	3	S			Offered in alternate term than OC 333	CORE ED Social Science if taken as OC 203
SOC 204z+*	Introduction to Sociology	3	F, W, S	U, F, W, S	W		
SOC 381	Social Dimensions of Sustainability	4	W	W, S			
SOC 480*	Environmental Sociology	4	F (hybrid)	U			CORV section: No Freshman or Sophomore Ecampus Section: No Freshman
SOC 481*	Society and Natural Resources	4	S	U, W, S			No freshman.
SUS 350+*	Sustainable Communities	4	W, S	U, F, W, S	F		No Freshman or Sophomore.
SUS 420	Social Dimensions of Sustainability	3		W			
WGSS 440*	Women and Natural Resources	3		U, W			

Note: Up to 6 credits of appropriate internships, projects or study abroad may be used to fulfill credit requirements as approved by petition.
Option Code: 675 **Total Credits:** 37 minimum
*=Baccalaureate Core / ^ =WIC (Writing Intensive Course) / + = Core Education (for students admitted Summer 2025 onward.)
CORV= CORVALLIS CAMPUS, CASC= CASCADES CAMPUS, ECMP = ECAMPUS - FALL = F, WINTER = W, SPRING = S, SUMMER = U

Landscape Analysis

IMPORTANT Advising Notes: Students pursuing the Landscape Analysis option should take MTH112 or MTH 241 and ST 351 for the greatest range of elective course choices. This specialization option will allow students to earn the Geographic Information Science Undergraduate Certificate through the College of Earth, Ocean, and Atmospheric Sciences concurrently with their BS degree through the College of Forestry.

Requirement: Measurements (4 credits) CHOOSE ONE

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
FE 208	Forest Surveying	4	F, W, S	F, W, S		MTH 112z or MTH 241 or MTH 245 or MTH 251 or MTH 252 with C or better.	

Requirement: Foundations of Geographic Information Science (15-16 credits) ALL REQUIRED

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
GEOG 201+*	Foundations of Geospatial Science and GIS	4	F, W, S	U, F, W, S			
GEOG 360	Geoscience I: Geographic Information Systems and Theory	4	F, W, S	U, F, W, S	W		
or FE 257	GIS and Forest Engineering Applications	3	F, W	F			
GEOG 370	Cartography	4	W, S	U, F		GEOG 201 or GEOG 360 or FE 257 or CE202 with minimum grade of C-	
GEOG 380	Remote Sensing: Principles and Applications	4	F	F, W		GEOG 201or GEOG 360 or FE 257 or CE 202 with minimum grade of C-	
or FE 444	Remote Sensing and Photogrammetry	4	F			Prerequisites: FE 257 and (MTH 112z, MTH 241, MTH 251, MTH 252) and (PH 201 or 211). A minimum grade of C.	

Requirement: Geographic Information Science Electives (7-8 credits) CHOOSE TWO to THREE

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
CE 413	GIS In Water Resources	3				Recommend Senior standing or a previous introductory GIS course.	Not currently scheduled.
CROP/ HORT 414	Precision Agriculture	4	S	S		Access to a computer with a valid Windows or Mac operating system is required for this course. Google Chromebooks will not be compatible with the required software.	
FE 310	Forest Route Surveying	4	S			(FE 208 or FE 308) or CE 361 or CEM 263 (all with C or better)	
FE 423	Unmanned Aircraft Systems Remote Sensing	3	F			GEOG 380 (was GEOG 480) or GEOG 481. Minimum grade of C.	Seniors only.
FW 303	Survey of Geographic Information Systems	3					NOT a lab/skills class. Not currently scheduled.

GEOG 361	Quantitative Geospatial Analysis and Modeling	4	W	W		GEOG 360 and (MTH 112z, 241z, 251z) and ST 351. Min grade of C- in all	
GEOG 451	Planning Principles and Practices for Resilient Communities	4	F	W		CE202, FE 257 or GEOG 260 with min C-	
GEOG 460	GIS and Spatial Data Science	4	S	F,W		(GEOG 360, FE 257 or CE 202) and (MTH 112z, 251z) and (ST 314, 351 or 351H). Min grade of C- in all.	
GEOG 462	GIScience III: Programming for Geospatial Analysis	4	S	S		GEOG 361 or GEOG 460 with minimum grade of C-	
GEOG 463	Analytical Workflows for Earth Systems Science	4	F			ST314 or ST 351 with C- or better	
GEOG 464	Geospatial Perspectives on Intelligence, Security and Ethics	3	S	F, W		GEOG 360 with minimum grade of C-	
GEOG 471	Advanced Cartography	4	F			GEOG 370	
GEOG 472	Interactive Cartography	3				GEOG 361 or GEOG 370. Min C- in all.	Not currently scheduled.
GEOG 481	Satellite Image Analysis	4	W	S		GEOG 380 (was GEOG 480) and (ST 314 or ST 351 or ST 351H) Minimum grade of C- in all	
NR 410	Internship	varies	U, F, W, S	U, F, W, S		*Must be approved by GIS Cert Program and of a GIS nature to count for certificate.*	Departmental Approval Required. Internship must involve GIS.
SOIL 468	Soil Landscape Analysis	4		W		SOIL/CSS 466 (may be taken concurrently).	

Requirement: Natural Resources Electives Select a minimum of 11 Credits in a disciplinary area related to Geoscience

Choose a minimum of 11-12 credits in a disciplinary area related to GI Science to reach a minimum of 37 credits in the option.

Student will be required to submit an academic plan for completion of the option which will be approved by academic advisor or Natural Resources Program Director.

Note: Up to 6 credits of appropriate internships, projects or study abroad may be used to fulfill credit requirements as approved by petition.
Option Code: 689 **Total Credits:** 37 minimum
*=Baccalaureate Core / ^ =WIC (Writing Intensive Course) / + = Core Education (for students admitted Summer 2025 onward.)
CORV= CORVALLIS CAMPUS, CASC= CASCADES CAMPUS, ECMP = ECAMPUS / FALL = F, WINTER = W, SPRING = S, SUMMER = U

Natural Resource Education

Requirement: Measurements (4 credits) CHOOSE ONE

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
FES 430	Forest as Classroom	4		F, S		Forest as Classroom	

Requirement: Foundations of Natural Resource Education (10 credits) ALL REQUIRED

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
FOR 111+	Introduction to Forestry	3	F, S	U, W		CORE 100*, 300*, BA 100*, 300*, ED 100*, 300*, ENGR 110*, 310*, LA 100*, 300*, SCI 100* or 300*. * May be taken concurrently.	
or FES 342	Forest Types of the Northwest	3		W	F		
FW 251	Principles of Fish and Wildlife Conservation	3	W	U, F, W, S	F	Recommend one course in Introductory biology	Corvallis campus restricted to FW majors.
TRAL 493	Environmental Interpretation	4	S	U, F, W			

Requirement: Education and Program Development (13 credits)

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
ED 216+*	Purpose, Structure and Function of Ed in a Democracy	3	F, W, S	U, F, W, S	F, W		
or ED 219+*	Social Justice, Civil Rights and Multiculturalism in Education	3	F, W, S	U, F, W, S	S		
ED 253+	Learning Across the Lifespan	3	F, W, S	U, F, W, S	S		
NEW FES 422	Research Methods in Social Science	4	W	S			REPLACES ED 496 which in no longer offered
SED 413	Inquiry in Science and Science Education	3	F	S		Analytical, evaluation, and reasoning skills.	

Requirement: Electives (minimum of 10 credits)

CHOOSE YOUR PATH: Students will select a minimum of 10 credits from either the Education Electives or Natural Resource electives (or both). Students may choose to focus on teaching in informal education settings or formal classroom instruction in middle or high schools.

Students also pursuing the Secondary Education major or the Master of Science in Education should choose courses that can double count for the courses listed in Content Mastery for Biology or Integrated Science. An Oregon teacher license requires additional science courses not listed in the Natural Resource major or the Natural Resource Education option. To satisfy the biology and integrated science endorsement requirements, Natural Resource students need to take the 200-level biology, two additional courses in chemistry to make it a full year and at least two physics classes. Students must work closely with their advisor(s) to plan an appropriate plan of study to meet their goals.

Education focused elective choices (may double count with Education major or minor and preparation for teaching in middle or high school classroom)

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
ED 216+*	Purpose, Structure and Function of Ed in a Democracy	3	F, W, S	U, F, W, S	F, W		
or ED 219+	Social Justice, Civil Rights and Multiculturalism in Education	3	F, W, S	U, F, W, S	S		
ED 309	Field Practicum	variable	U, F, W, S	U, F, W, S			Requires Departmental Approval from College of Ed.
ED 411	Applied Educational Psychology in K12 Schools	3		W		Recommend ED 253.	
ED 412	Learning Styles and needs in adolescence	2					Restricted to Education majors. Need to be double major. Not currently scheduled.
SED 406	Projects	varies					Requires Education Department approval.

Natural Resource focused electives (background courses for informal learning environment educators)

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
BI 150	Introduction to Marine Biology	3	S				
BI 347	Oceans in Peril	3	F	S		BI 221/222/223 or BI 221z/222z/223z OR BI 204/205/206. A minimum grade of C- in all.	No Freshman.
BOT 301*	Human Impacts on Ecosystems	3	W			One year of biology or chemistry recommended.	Was BI 301.
FES 452	Biodiversity Conservation in Managed Forests	3	W	F, S		Recommend FES 240 or FES 341 or BI 370.	No freshman or sophomore.
FW 302	Biology and Conservation of Marine Mammals	4		F, W, S		BI 221/222/223 or BI 204/205/206. Minimum C- in all.	
FW 324+*	Food from the Sea	3	S	U, F, W, S			No Freshman or Sophomore.
FW 340+*	Power and Justice in U.S Natural Resource Management	3	F, W	U, F, W, S			No Freshman or Sophomore. (was "Multicultural Perspectives in Natural Resources")
FW 426	Coastal Ecology and Resource Management	5		F (Hybrid)			Departmental Approval required. No Freshman or Sophomore. HMSC = Hatfield Marine Science Center. All majors welcome.
FW 451	Avian Conservation and Management	3	W	F, W		BI 370 or FW 321	
FW 458	Mammal Conservation and Management	4	S	F, S		BI 370 or FW 321.	
FW 464	Marine Conservation Biology	3	S	W		BI 370 or BI 371.	
GEO 202+*	Earth Systems Science	4	W				
GEO 203+*	Evolution of Planet Earth	4	S				
GEO 307*	National Park Geology and Preservation	3	F	U, S			
LEAD 430	Foundations of Adventure Leadership	3	F,S				
NR 380	Nature in Literature over the Centuries	3		W			Not currently scheduled.
RNG 341	Rangeland Ecology and Management	3	F, W	F, W, S	W	BI 221z/222z/22z3 or BI 204/205/206. Coursework in soil science and ecology; analytical, critical thinking and synthesis skills.	

RNG 421	Rangeland Restoration and Management	4		F		BI 221/222/223 or BI 204/205/206 required. Recommend course work in soils and ecology.	
RNG 455	Riparian Ecohydrology and Management	4	S	W	F		
TRAL 251	Recreation Resource Management	4	F	S	F, W		
TRAL 351	Outdoor Recreation on Public Lands	4	W	F, S		TRAL 251 with minimum of C-	
TRAL 357*	Parks and Protected Areas Management	3	F	S	F		
~~Z 349*~~	~~Biodiversity: Causes, Consequences and Conservation~~	~~3~~					No longer taught. May sub BI 477

Note: Up to 6 credits of appropriate internships, projects or study abroad may be used to fulfill credit requirements as approved by petition.
Option Code: 679 **Total Credits:** 37 minimum
*=Baccalaureate Core / ^ =WIC (Writing Intensive Course) / + = Core Education (for students admitted Summer 2025 onward.)
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Policy and Management

Requirement: Measurements (4 credits) CHOOSE ONE

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
FES 422	Research Methods in Social Science	4	W	S		ST 201 or ST 243z or ST 351	
PS 300^	Research Methods	4	F, W, S	U, F, W, S			

Requirement: Social Science and Natural Resources (6-8 credits) CHOOSE TWO

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
AEC 122+*	Introduction to Climate Change Economics and Policy	3	F	U, F, S			
AEC 253*	Environmental Law, Policy and Economics	4	F, W	U, F, W, S			
AG 201+*	Indigenous Ecosystem Sciences in PNW Regions	3	F, S	U, F, W, S			(was AG 301)
ANTH 477	Ecological Anthropology	4	F	U		Recommend 3 credits social science and Jr/Sr standing	
FW 323	Management Principles of Pacific Salmon in Northwest	3		U, F, W, S	S		
FW 340+*	Multicultural Perspectives in Natural Resources	3	F, W	U, F, W, S			
GEOG 240+*	Human Dimensions of Climate Change	3	W	S			
GEOG 250+*	Land Use Planning for Sustainable Communities	3					No longer offered online. Not offered on Corvallis campus in 26/27 AY
GEOG 300+*	Sustainability for the Common Good	3	F, W, S	U, F, W, S			No Freshman or Sophomore.
GEOG 350+*	Geography of Natural Hazards	3		U, S			
GEOG 430	Resilience-Based Natural Resource Management	3		S			
GEOG 451	Planning Principles and Practices for Resilient Communities	4	F	W		CE202, FE 257 or GEOG 260 with min C-	
or GEOG/ENSC 452	Environmental Assessment	3	S	F			
NR 312	Critical Thinking for NR Challenges	3					
SOC 204z+*	Introduction to Sociology	3	F, W, S	U, F, W, S	W		
SOC 480*	Environmental Sociology	4	F (hybrid)	U			CORV section: No Freshman or Sophomore Ecampus Section: No Freshman
SOC 481*	Society and Natural Resources	4	S	U, W, S			No freshman.
SUS 331+*	Sustainability, Justice, and Engagement	3	W, S	F, W, S		Recommend completion of Difference, Power and Oppression course; collaboration, critical thinking and synthesis skills.	

Requirement: Natural Resource Policy (12-13 credits) CHOOSE FROM AT LEAST TWO DEPARTMENTS

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
AEC 351*	Natural Resources Economics & Policy	3	W	F, S		AEC 250 or ECON 201z. MTH111z is recommended.	
AEC/ECON 352*	Environmental Economics and Policy	3	F, S	U, F, W, S	S	AEC 250 or ECON 201z	
AEC 353*	Introduction to Coastal and Marine Resource Economics	3				MTH 111z [was MTH 111] and AEC 250 or ECON 201z. All with C- or above.	Not currently scheduled.
AEC 432	Environmental Law	4	S	S			
FES 365*	Issues in Natural Resource Conservation	3		U, W	W		
FES 486^	Public Lands Policy and Management	3	F, S	U, F, W, S	W		Sophomore standing recommended.
FOR 431	Economics and Policy of Forest Wildland Fire	4	S	S		AEC 250 or ECON 201z or FOR 330 with minimum C.	
FOR 461	Forest Policy Analysis	3					Not currently scheduled.
FOR/FE 463^	Forest Policy and Regulation	3	F, W				No Freshman/Sophomore.
FW 350+*	Endangered Species, Society and Sustainability	3		U, F, W	W	Recommend FW 251.	No Freshman or Sophomore.
FW 415	Fish and Wildlife Law and Policy	3		F, W		Recommend PS 201 or other political science intro course.	
FW 422	Introduction to Ocean Law	3		F, S			
PS 201+*	Introduction to United States Government and Politics	4	F, W	U, F, W, S	F, W		
PS 455*	The Politics of Climate Change	4		W			
PS 470	Global Food Politics and Policy	4		U			
PS 473	U.S. Energy Policy	4	F	S			
PS 475	Environmental Politics and Policy	4	F	U, F, W	S (hybrid)		
PS 477	International Environmental Politics and Policy	4		F			
PS 478	Renewable Energy Policy	4		W			

Requirement: Natural Resource Management (CHOOSE 12 CREDITS MINIMUM)

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
BOT 440	Field Methods in Plant Ecology	4		U, S		Recommend an ecology course and statistics.	
ENSC 321^	Environmental Case Studies	3	F, W, S	U, F, W, S	W	Recommend WR 121 and one year of college bio; critical thinkings, problem solving and writing skills	
FES 440	Wildland Fire Ecology	3	W	W, S	S	Recommended for Juniors or Seniors with coursework in Ecology and Natural Resource Management, analytical, critical thinking and reasoning skills.	
FES/HORT 455	Urban Forest Planning, Policy and Management	4		F, W		FES 350 or HORT 350 with minimum grade of C-	
FES 445	Ecological Restoration	4	F, S	U, F, W, S	S	Recommend BI 370	

FOR 346	Topics in Wildland Fire	3	S	W, S		Recommend coursework in forest biology or ecology such as FES 240 or FES 341	
FOR 436	Wildland Fire Science and Management	4	F	F, W			
FW 303	Survey of Geographic Information Systems	3					NOT a lab/skills class. Not currently scheduled.
FW 323	Management Principles of Pacific Salmon in Northwest	3		U, F, W, S	S		
FW 325+*	Global Crises in Resource Ecology	3		F, W, S			No Freshman or Sophomore.
FW 326	Integrated Watershed Management	3		U, F, W	W	FW 251 recommended	No Freshman.
FW 479	Wetlands and Riparian Ecology	3		U, F, W		BI 370 or FW 321.	
GEOG 201+*	Foundations of Geospatial Science and GIS	4	F, W, S	U, F, W, S			
GEOG 340*	Introduction to Water Science and Policy	3		U, W, S	F		
GEOG 440	Conflict, Cooperation, and Control of Water in the US	3	W	W			
GEOG 441	The World's Water	3	S				
NMC 311	Intro to Non-Profit Management	3		S			
RNG 455	Riparian Ecohydrology and Management	4	S	W	F		
RNG 491^	Rangeland Management and Planning	4				RNG 341	Not currently scheduled.
TRAL 357*	Parks and Protected Areas Management	3	F	S	F		

Requirement: Resource Economics (3-4 credits) CHOOSE ONE

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
AEC 351*	Natural Resources Economics & Policy	3	W	F, S		AEC 250 or ECON 201z. MTH111z is recommended.	
AEC/ECON 352*	Environmental Economics and Policy	3	F, S	U, F, W, S	W	AEC 250 or ECON 201z	
AEC 353*	Introduction to Coastal and Marine Resource Economics	3				MTH 111z [was MTH 111] and AEC 250 or ECON 201z. All with C- or above.	Not currently scheduled.
ECON 466	Economics of Traditional and Renewable Energy	4	W	F		ECON 201z	
FOR 329	Forest Resource Economics I	4	W			ST 243z [was ST 201] or ST 351	
FOR 431	Economics and Policy of Forest Wildland Fire	4	S	S		AEC 250 or ECON 201z or FOR 330 with minimum C.	
TRAL 432	Economics of Recreation and Tourism	3	S	S		Recommend AEC 250 or ECON 201z and ST 202 or 202H	

Note: Up to 6 credits of appropriate internships, projects or study abroad may be used to fulfill credit requirements as approved by petition.
Option Code: 791 **Total Credits:** 37 minimum
*=Baccalaureate Core / ^ =WIC (Writing Intensive Course) / + = Core Education (for students admitted Summer 2025 onward.)
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Urban Forest Landscapes

Requirement: Measurements (2 credits) REQUIRED

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
FES 475	Urban Forest Data Analysis	2		W, S		FES 455 or HORT 455	Replaces BOT 440 or GEOG 360

Requirement: Urban Forest Foundations (25-26 credits) REQUIRED

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
BOT 341	Plant Ecology	4	S	F, W, S		Recommend BOT 321 and BI 223	Fall Ecampus section restricted to BOT majors.
or BOT 451	Plant Pathology	4	F	W, S		BI 221z/222z/223z or BI 204/205/206 or BOT 220. Min C- in all.	
or FES 412	Forest Entomology	3	S			BI 204 or BI 211 or BI 212 or BI 221 with C or higher and/or equivalent.	
or BOT/FOR 413	Forest Pathology	3	W			BI 204, BI 221z, BI 221, BI 213 or FES 240 with a minimum of C.	
FES/HORT 350	Urban Forestry	3		F, W, S		Foundational Horticulture or Forestry courses recommended.	
FES 445	Ecological Restoration	4	F, S	U, F, W, S	S	Recommend BI 370	
FES/HORT 447	Arboriculture	4		F, S		Recommend (FES 241 or HORT 226 or HORT 228) and (FOR 111 or HORT 112)	
FES/HORT 455	Urban Forest Planning, Policy and Management	4		F, W		FES 350 or HORT 350 with minimum grade of C-	
FW 462	Ecosystems Services	3		W, S		BI 370 or equivalent recommended.	
or FW 418	Urban Ecology	3		U, F, W		BI 370 or FW 321	
HORT 315	Sustainable Landscapes: Maintenance, Conservation, Restore	4	W			Recommend basic knowledge of plant physiology.	

Requirement: Social/Political/Community Integration (11-12 credits) REQUIRED

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
ANTH 481*	Natural Resources and Community Values	3	S	U, F, W, S		Recommend 3 credits of social science	
or SOC 481*	Society and Natural Resources	4	S	U, W, S			No freshman.
AEC 432	Environmental Law	4	S	S			
or FOR/FE 463^	Forest Policy and Regulation	3	F, W				
or PS 475	Environmental Politics and Policy	4	F	U, F, W	S (hybrid)		
GEOG 250+*	Land Use Planning	3					ALLOWED SUBSTITUTE: No longer offered online. Not offered on Corvallis campus in 26/27 AY
or GEOG 451	Planning Principles and Practices for Resilient Communities	4	F	W		CE202, FE 257 or GEOG 260 with min C-	

or GEOG /ENSC 452	Environmental Assessment	3	S	F			

Note: Up to 6 credits of appropriate internships, projects or study abroad may be used to fulfill credit requirements as approved by petition.
Option Code: 685 **Total Credits:** 37 minimum
*=Baccalaureate Core / ^ =WIC (Writing Intensive Course) / + = Core Education (for students admitted Summer 2025 onward.)
CORV= CORVALLIS CAMPUS, CASC= CASCADES CAMPUS, ECMP = ECAMPUS - FALL = F, WINTER = W, SPRING = S, SUMMER = U

Wildland Fire Ecology

Requirement: Measurements (2-4 credits) CHOOSE ONE

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
BOT 440	Field Methods in Plant Ecology	4		U, S		Recommend an ecology course and statistics.	
FW 255	Field Sampling of Fish and Wildlife	3	F, S	U, F, W, S	S	Recommend WR 121 and familiarity with personal computers recommended.	Restricted to FWCS majors.
GEOG 360	Geoscience I: Geographic Information Systems and Theory	4	F, W, S	U, F, W, S	W		

Requirement: Foundations in Wildland Fire (17 credits) REQUIRED

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
FES 440	Wildland Fire Ecology	3	W	W, S	S	Recommended for Juniors or Seniors with coursework in Ecology and Natural Resource Management, analytical, critical thinking and reasoning skills.	
FES 445	Ecological Restoration	4	F, S	U, F, W, S	S	Recommend BI 370	
or RNG 421	Rangeland Restoration and Management	4		F		BI 221z/222z/223z or BI 204/205/206 required. Recommend course work in soils and ecology.	
FOR 431	Economics and Policy of Forest Wildland Fire	4	S	S		AEC 250 or ECON 201z or FOR 330 with minimum C.	
FOR 436	Wildland Fire Science and Management	4	F	F, W			

Requirement: Ecological and Natural Resource Electives (Choose 17-18 credits)

Course #	Course Name	Credits	CORV	ECMP	CASC	Prerequisite	Restrictions/Advising Notes
BOT 341	Plant Ecology	4	S	F, W, S		Recommend BOT 321 and BI 223	
BOT 425	Flora of the Pacific Northwest	3	S			Recommend BOT 321.	
CROP 440	Weed Management	4	F	F, W		Recommend one year of biological science and one course in organic chemistry.	
FE 208	Forest Surveying	4	F, W, S	F, W, S		MTH 112 or MTH 241 or MTH 245 or MTH 251 or MTH 252 with C or better.	
FE 434	Forest Watershed Management	4	F			(CH 121 or CH201 or CH231) and (SOIL 205 or CSS 305 or CSS 205) and (MTH 241 or MTH 251). All with C minimum grade.	
FES 341	Forest Ecology	3	F, W	F, W, S	F	FES 240 or (BI 221/222/223) or (BI 204/205/206) or BI 370	
FES 342	Forest Types of the Northwest	3		W	F		

FES 412	Forest Entomology	3	S			BI 204 or BI 211 or BI 212 or BI 221 with C or higher and/or equivalent.	
FES 452	Biodiversity Conservation in Managed Forests	3	W	F, S		Recommend FES 240 or FES 341 or BI 370.	
FOR 346	Topics in Wildland Fire	3	S	W, S		Recommend coursework in forest biology or ecology such as FES 240 or FES 341	
FOR/BOT 413	Forest Pathology	3	W				
FOR 441	Silviculture Principles	4	F	F		FES 240 AND FES 241 with C minimum in all.	
FW 451	Avian Conservation and Management	3	W	F, W		BI 370 or FW 321	
FW 456	Freshwater Ecology and Conservation	5	S	W, S		BI 370 or BI 371 required. Recommend 9 credits of upper division biological sciences.	
FW 458	Mammal Conservation and Management	4	S	F, S		BI 370 or FW 321.	
FW 479	Wetlands and Riparian Ecology	3		U, F, W		BI 370 or FW 321	
FW 481	Wildlife Ecology	4		U, S		BI 370 or FW 321	
NR 325	Scientific Methods for Analyzing Natural Resource Problems	3		F		MTH111, 111z (C- or better) or score of 60 in ALEKS Math Placement test.	
SOIL 366	Ecosystems of Wildland Soils	3		U		SOIL 205 or CSS 205	
OR SOIL 388	Soil Systems and Plant Growth	4		F		SOIL 205 (and SOIL /FOR 206) or CSS 205 and (CH 121 or CH 221z) and BOT 220 or (BI 204/205205) or (BI 211/212/213) or BI 221/222/223)	
OR SOIL 466	Soil Morphology and Classification	4		S		SOIL 205 or CSS 205	

Note: Up to 6 credits of appropriate internships, projects or study abroad may be used to fulfill credit requirements as approved by petition.
Option Code: 687 **Total Credits:** 37 minimum
*=Baccalaureate Core / ^ =WIC (Writing Intensive Course) / + = Core Education (for students admitted Summer 2025 onward.)
CORV= CORVALLIS CAMPUS, CASC= CASCADES CAMPUS, ECMP = ECAMPUS / FALL = F, WINTER = W, SPRING = S, SUMMER = U

Individualized Specialty Option

The Individualized Specialty Option is a student designed option that allows a student to tailor the academic program to specific goals or interests related to natural resource management. This is often a good choice for students who have a significant amount of relevant transfer work or those who have a specific career goal that they are working toward.

In consultation with their academic advisor, students will develop a written proposal for a program of study that meets their goals as well as academic requirements. All specializations must have a minimum of 37 credits with at least 20 of those credits being upper-division credits. The proposal is submitted to the Natural Resources Program Director for approval. This plan should be submitted at least 6 terms prior to the planned graduation term. Students should contact their assigned academic advisor for information on developing an Individualized Specialty Option.

Here are some examples of recent areas of specializations that students have designed:

- Water Resource Management
- Sustainable Wilderness Recreation Management
- Food in Culture and Social Justice
- Holistic Land Management
- Marine Ecosystems and Human Impacts
- International Resource Management
- Rangeland Ecology and Management
- Communication and Outreach for Natural Resource Management
- Forest Management on Tribal Lands

Available on all campuses.