

ENVIRONMENT AND SUSTAINABILITY ECOLOGY EMPHASIS (WITH A 3+2 MASTER OF SCIENCE IN ECOLOGY)

The Ecology emphasis allows students to complete the B.A. in Environment and Sustainability (ENVS) and the Master of Science in Ecology (Ecology M.S.) at Western in five years. To remain qualified for the 3+2, upon earning 66 credits each student must have:

- maintained a 3.0 cumulative GPA and a 3.25 GPA within the major;
- completed BIOL 150, BIOL 151, BIOL 301, and MATH 213;
- fulfilled the 3-credit Internship requirement with a B or above and positive letter from the project sponsor;
- provided three letters of recommendation, at least one of which is to be a professional reference and at least one of which is to be an academic reference from the student's major at Western;
- confirmed acceptance by an Ecology MS faculty advisor;
- written a Statement of Purpose to the Ecology MS program, detailing early career ambitions and ideas and connections for the eventual master's thesis.

At this point, if any aspect of a student's performance is found to be insufficient, the Ecology MS Coordinator will recommend denial of acceptance to the Graduate Studies Dean and the School of ENVS Dean, in which case the student will need to find a new emphasis or minor in order to complete the undergraduate degree. Upon meeting the requirements above, after satisfactorily completing the GRE, and after Junior Year (reaching 97 credits in this plan—see "DEGREE PLAN") holding to the same GPA and general performance standards outlined above, if the student is accepted by a faculty advisor into the program, the School of Graduate Studies will designate the student as an "Ecology MS candidate with provisional acceptance." At this point the student must also declare their MS emphasis. Upon completion of Year Four of this plan, the student will receive the BA and the School of Graduate Studies may designate the student as an "Ecology MS degree seeking student." After Year Four, students who have completed all other requirements of the 3+2 program and all Western undergraduate requirements (120 total credits, 40 upper-division credits, general education requirements, the ENVS undergraduate courses listed under the Ecology emphasis, and the 18 credits of ENVS Ecology emphasis courses that come from the MS in Year 4), yet choose to leave the Ecology MS program before Year 5, will still have completed the undergraduate ENVS emphasis in Ecology and have earned the 120 credits necessary for a Western undergraduate degree.

Program Requirements

A minimum of 78 credits is required for the B.A. components of the emphasis. In the fifth year, an additional 21 credits of Ecology MS coursework results in the MS in Ecology degree. For all 3+2 Ecology students, at least 12 credits of biology upper-level and/or graduate electives (BIOL 320-489; 620-689) are required.

Code	Title	Credits
ENVS 100	Introduction to Environment and Sustainability (GT-SS2)	3
ENVS 200	Writing the Environment	3
ENVS 250	Environmental Justice	3
ENVS 301	Science of Sustainability and Resilience	3
ENVS 350	U.S. and Western Environmental Politics	3
ENVS 390	Environmental Monitoring	4
ENVS 400	Applied Sustainability	3
ENVS 410	Environmental Ethics	3
ENVS 499	Internship in Environmental Studies	1-6
Required supporting courses		
BIOL 150	Biological Principles (with laboratory) (GT-SC1)	4
BIOL 151	Diversity and Patterns of Life (with laboratory)	4
BIOL 301	General Ecology	3
CHEM 111	General Chemistry I (GT-SC2)	3
CHEM 112	General Chemistry Laboratory I (GT-SC1)	1
CHEM 113	General Chemistry II	3
CHEM 114	General Chemistry Laboratory II	1
ECON 215	Environmental Economics	3
MATH 213	Probability and Statistics (GT-MA1)	3
PHYS 125	Energy and the Environment (GT-SC2)	3
One of the following:		
ENVS 360	Global Environmental Policy	3
ENVS 370	Water Policy and Politics	3
GEOG 340	Intro Geographic Info Systems	3
One of the following:		
HWTR 200	This Is The Headwaters	1
HWTR 398	Headwaters Conference	1
Select one of the following:		
ANTH 230	Cultural Anthropology (with laboratory)	
ANTH 320	Cultural Ecology	
ENG 151	Borderlands: Representing Race, Class, Gender, and Sexuality	
POLS 250	Politics of the Environment	
POLS 340	Politics of Social Movements	
POLS 350	Human Rights	
POLS 355	The Global South	
POLS 370	Political Economy	
PSY 308	Environmental Psychology	
PSY 410	Multicultural Psychology	
PSY 457	Social Psychology	
SOC 150	Environmental Sociology	
SOC 168	Social Problems	
SOC 340	Social Movements	
SOC 380	Social Class, Status, and Power	
Core Ecology MS Courses, to be taken in Year 4 of 3+2 (Year 1 of MS):		
BIOL 606	Ecological Research Methods	3
BIOL 613	Advanced Ecological Analysis	3
BIOL 690	Ecology MS Proposal Development	3
One or more of the following to be taken in Fall 4 of 3+2 (Fall 1 of MS):		
Biology elective (620 or above, excluding 690, 695, 696)		3-4

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ENVS 608	Environmental Politics & Policy	3
ENVS 611	Integrative Skills for Environmental Management	3
ENVS 623	Studies in Environmental Management	1-6
ENVS 625	Studies in Integrative and Public Land Management	3
One or more of the following to be taken in Spring 4 of 3+2 (Spring 1 of MS):		
Biology elective (620 or above, excluding 690, 695, 696)		3-4
ENVS 615	From Climate Science to Action	3
ENVS 618	Public Lands Management	3
ENVS 623	Studies in Environmental Management	1-6
ENVS 625	Studies in Integrative and Public Land Management	3
Total Credits		103-120

Upon successful completion of the prescribed courses listed above, University defined General Education, and elective requirements totaling 120 credits (with 40 at the 300-level or higher), students are eligible for their B.A. (ENVS) or B.S. (BIOL) conferral. Students electing to complete the M.S. in Ecology must follow the balance of their declared emphasis curriculum.

Upon the acceptance of MS proposals (BIOL 690), MS candidates must be continuously enrolled for at least 1 credit of BIOL 695 or 696 until successful thesis defense.

For a full description of the required Graduate coursework, please see the appropriate MS program in the Western Graduate Catalog (<https://catalog.western.edu/graduate/programs/ecology/>).

Course	Title	Credits
Year One		
Fall		
ENVS 100	Introduction to Environment and Sustainability (GT-SS2)	3
BIOL 150	Biological Principles (with laboratory) (GT-SC1)	4
Elective	Elective or minor course	6
HWTR 100	First Year Seminar	1
ENG 102	Writing and Rhetoric I (GT-CO1)	3
Credits		17
Spring		
ENVS 200	Writing the Environment	3
PHYS 125	Energy and the Environment (GT-SC2)	3
ENG 103	Writing and Rhetoric II (GT-CO2)	3
BIOL 151	Diversity and Patterns of Life (with laboratory)	4
MATH 141	Precalculus (GT-MA1)	4
Credits		17
Year Two		
Fall		
CHEM 111 & CHEM 112	General Chemistry I (GT-SC2) and General Chemistry Laboratory I (GT-SC1)	4
Gen Ed	General Education Courses	3
HWTR 200 or HWTR 398	This Is The Headwaters or Headwaters Conference	1
ENVS 250	Environmental Justice	3
Credits		11
Spring		
ENVS 350	U.S. and Western Environmental Politics	3
ECON 215	Environmental Economics	3
MATH 213	Probability and Statistics (GT-MA1)	3
BIOL 301	General Ecology	3

CHEM 113 & CHEM 114	General Chemistry II and General Chemistry Laboratory II	4
Credits		16
Summer		
ENVS 499	Internship in Environmental Studies	3
Credits		3
Year Three		
Fall		
ENVS 390	Environmental Monitoring	4
GEOG 340 or ENVS 370	Intro Geographic Info Systems or Water Policy and Politics	3
ENVS 410	Environmental Ethics	3
Gen Ed	General Education Courses	3
Elective	Elective	3
Credits		16
Spring		
ENVS 301	Science of Sustainability and Resilience	3
ENVS 360	Global Environmental Policy	3
Elective	chosen from selection of classes on cultural, racial, ethnic, gender, sex, sexuality, and/or class contexts	3
Elective	Electives	9
Credits		18
Summer		
Submit 3+2 application materials by July 1 (66 credit mark completed)		
Credits		0
Year Four		
Fall		
BIOL 606	Ecological Research Methods	3
Two of:		
BIOL 620-689		3-4
Or		
ENVS 608 or ENVS 611 or ENVS 623 or ENVS 625	Environmental Politics & Policy or Integrative Skills for Environmental Management or Studies in Environmental Management or Studies in Integrative and Public Land Management	3
Gen Ed	General Education Courses	3-6
Credits		12-16
Spring		
BIOL 613	Advanced Ecological Analysis	3
At least one of:		
BIOL 620-689		3-4
Or		
ENVS 615 or ENVS 618 or ENVS 623 or ENVS 625	From Climate Science to Action or Public Lands Management or Studies in Environmental Management or Studies in Integrative and Public Land Management	3
BIOL 690	Ecology MS Proposal Development	3
ENVS 400	Applied Sustainability	3
Credits		15-16
Summer		
BIOL 695 or BIOL 696	Ecology/ Conservation Thesis Research or Fisheries/ Wildlife Thesis Research	3
Credits		3
Year Five		
Fall		
9 credits of the following		
BIOL 695 or BIOL 696	Ecology/ Conservation Thesis Research or Fisheries/ Wildlife Thesis Research	1-6
And		
BIOL 620-689		3-4
Or		

ENVS 623 or ENVS 625	Studies in Environmental Management or Studies in Integrative and Public Land Management	3
Credits		7-13
Spring		
9 credits of the following:		
BIOL 695 or BIOL 696	Ecology/ Conservation Thesis Research or Fisheries/ Wildlife Thesis Research	1-6
And		
BIOL 620-689		3-4
Or		
ENVS 623 or ENVS 625	Studies in Environmental Management or Studies in Integrative and Public Land Management	3
Credits		7-13
Total Credits		142-159