UCONN | COLLEGE OF AGRICULTURE, HEALTH AND NATURAL RESOURCES

PLAN OF STUDY FORM

Catalog Year 2024-2025 ENVIRONMENTAL SCIENCES MAJOR

DIRECTIONS

Department Head's Signature

- This Plan of Study (plan) is used as a *worksheet* during initial registration and every subsequent semester to determine minimum requirements and progress toward completing the degree. A *preliminary plan* is developed and submitted to the advisor by the end of the sophomore year (or equivalent time for transfer students).
- A final plan must be approved by advisor and the department head, and submitted to the Degree Auditor in the Registrars Office (1st floor, Wilbur Cross Building) no later than the end of the tenth week of classes of the semester prior to the anticipated semester of graduation.
- Students must complete all major and general education course requirements and earn:

At least 120 credits toward the degree

At least a 2.0 Cumulative Grade Point Average (CGPA)

At least a 2.0 Grade Point Average for ALL courses listed in the 36 Credit Requirement

- University of Connecticut General Education Requirements (GER), are outlined in the Academic Regulations section of the Undergraduate Catalog. Only approved courses may be used to meet requirements.
- Students should use their Academic Requirements Report (accessible in Student Admin) along with the Plan of Study to view their graduation requirements and assess status toward degree. Students must be attentive to credit restrictions (repeated courses, out of sequence classes, etc.). Courses taken Pass/Fail may NOT be used to meet any requirements.

STUDENT AND DEGREE INFORMATION ☐ Preliminary Plan ☐ Final Plan Select One: Must be filed out complete on your final plan of study. __ Student I.D.: _____ Name_ _____ Email Address: __ Phone #: _ Current Address: —— State City/Town Zio Code ☐ May ☐ August December Month and Year of Anticipated Graduation: Year: ___ Are you pursuing a double major in CAHNR: ☐Yes ☐ No If YES, submit Double Major Attachment with final plans of study Please list below any minors that you plan to earn and submit a final minor plan of study with your final major plan of study. □No At the completion of semester you intend to graduate, will you have earned 120 or more credits? LiYes APPROVAL SIGNATURES Student Signature Advisor Signature Date

PART I: GENERAL EDUCATION REQUIREMENTS (GER) 1

Courses approved to meet GER are outlined in the Academic Regulations section of the *Undergraduate Catalog*.

Courses in Content Areas 1-3 must be in 6 different departments.

One course from Content Area 4 may be used to fulfill a requirement in Content Areas 1-3.

Cont	ent Area	Dept.	Course No.	Credits	Semester/Year	Grade
	Foreign Languages (3 years single language in hi	gh school) O	R pass second	course in fir	st-year college sequenc	e
					/	
	ENGL 1007 or 1010 or 1011					
	"W" Course					
	"W" Course (within major)					
	"Q" Course					
	"Q" Course (MATH or STAT)					
	Environmental Literacy (total 3 credits)					
1	Arts & Humanities (total 6 credits)					
'	Arts & Humanities (total o creatis)					
2	Social Sciences (total 6 credits)					
	Social ociences (lotal o credits)				/	
3	Science & Technology (total 6 credits – include				I	
	one 4-credit laboratory course)				I	
4	Diversity & Multiculturalism (total 6 credits – one				I	
	must be "International" course)					

Computer Technology Competency: See major requirements

Information Literacy Competency: See major requirements

PART II: INDIVIDUAL COURSE REQUIREMENTS OF ENVIRONMENTAL SCIENCES MAJOR¹

Courses in this section that are numbered 2000-level or above may also be used to meet the 36 Credit Requirement (Part III).

ALL of required courses in Basic (Natural) Sciences:

Dept.	No.	Course Title	Credits	Semester/Year	Grade
BIOL	□ 1107	Principles of Biology I	4	/	
D.O.	□ 1108	Principles of Biology II	,		
BIOL	□ <u>or</u> 1110	or Introduction to Botany	4	/	
OUEM	☐ 1127Q <u>and</u> 1128Q	General Chemistry I and II			
CHEM	□ or 1124Q, 1125Q and 1126Q or Fundamentals of General Chemistry –			/	
MATH	☐ 1131Q	Calculus I	4		
MATH	☐ 1132Q	Calculus II	4		
DI IVO	☐ 1201Q <u>and</u> 1202Q	General Physics I and II			
PHYS	☐ <u>or</u> 1401Q <u>and</u> 1402Q	or General Physics with Calculus	8	//	
	□ 1000Q	Intro to Statistics I			
STAT	□ <u>or</u> 1100Q	or Elementary Concepts of Statistics		/	
	□ <u>or</u> 3025Q	or Statistical Methods (Calculus Level I)			
NRE	□ 1000E	Environmental Science	3		

^{*}ARE 1150, ECON 1200 or 1201, ERTH 1050, GEOG 2300E, and MARN 1002E are pre-requisites for several upper division course concentration options. It is the student's responsibility to ensure that all pre-requisites in the catalog for concentration courses have been satisfied.

Required Sophomore Seminar Course:

Dept.	No.	Course Title	Credits	Semester/Year	Grade
ENVS	□ 2000	Integrating Humans and the Environment	3	/	

Required Capstone Course:

Dept.	No.	Course Title	Credits	Semester/Year	Grade
NRE	□ 4000W	Natural Resources Planning and Management	3	/	

Required Internship or Research Experience (1-6 credits): (approved by advisor)

Dept.	No.	Course Title	Credits	Semester/Year	Grade
				,	

Writing Competency: Students must pass NRE 4000W for required 2000-level or above course approved by major. Computer Technology Competency: Students must pass NRE 4000W. Information Literacy Competency: Students must pass NRE 4000W.

In addition, all students majoring in Environmental Sciences must declare and fulfill the requirements of a concentration in a discipline associated with the program before graduation. A minimum of 24-credits is required within a declared concentration. Approved concentrations are listed on the following pages:

SUSTAINABLE SYSTEMS CONCENTRATION

Students must complete at least two courses from each of the following Knowledge Competencies. The same course cannot be used to fulfill more than one knowledge competency.

Resource Management - TWO of the following:

Dept.	No.	Course Title	Credits	Semester/Year	Grade
EEB	□ 2208E	Introduction to Conservation Biology	3		
GEOG	□ 3340	Environmental Planning and Management	3		
MARN	□ 3030	Coastal Pollution and Bioremediation	3		
NRE	□ 2010	Natural Resources Measurements	3		
NRE	□ 2215E	Introduction to Water Resources	3		
NRE	□ 2345	Introduction to Fisheries and Wildlife	3	1	
NRE	□ 2600E	Global Sustainable Natural Resources	3		
NRE	□ 3105	Wetlands Biology and Conservation	3		
NRE	□ 3125	Watershed Hydrology	3		
NRE	□ 3305	African Field Ecology & Renewable Resource Mgmt.	4		
NRE	□ 3335	Wildlife Management	3		
NRE	□ 3345/W	Wildlife Management Techniques	4		
NRE	□ 3500	Exurban Silviculture	4		
NRE	□ 3535	Remote Sensing of the Environment	3		
NRE	□ 4255	Water Quality Management	3		
NRE	□ 4335	Fisheries Management	4		
NRE	□ 4575	Natural Resource Applications of GIS	4		
SPSS	□ 2100E	Environmental Sustainability of Food Production in Developed Countries	3		

Ecological Systems - TWO of the following:

Dept.	No.	Course Title	Credits	Semester/Year	Grade
EEB	□ 2100E	Global Change Ecology	3		
EEB	☐ 2222E	Plants in a Changing World	3		
EEB	☐ 2244E/WE	General Ecology			
EEB	□ 3247	Freshwater Ecology	4	/	
EEB	☐ 4230W	Methods of Ecology	4		
EEB/MARN	□ 3230/3014	Marine Biology	3		
NRE	□ 2455	Forest Ecology	3		
NRE	□ 4205	Stream Ecology	3		
NRE	□ 4340	Ecotoxicology	3		

Students must complete at least one course from each of the following Knowledge Competencies. The same course cannot be used to fulfill more than one knowledge competency.

Built Systems – ONE of the following:

Dept.	No.	Course Title	Credits	Semester/Year	Grade
AH	☐ 3175E	Environmental Health	3		
ENVS/EVST/ ENVE	□ 3110E	Brownfield Redevelopment	3		
GEOG	□ 2400E	Introduction to Sustainable Cities	3		
LAND	☐ 3230WE	Sustainable Environmental Planning & Landscape Design	3		
NRE	□ 3265	Sustainable Urban Ecosystems	3		
NRE	□ 4425	Urban and Community Forestry	3		
SPSS	□ 3550	Urban Plant Systems Construction and Maintenance	3		

Governance & Policy – ONE of the following:

Dept.	No.	Course Title	Credits	Semester/Year	Grade
AH	□ 3174	Environmental Laws, Regulations and Issues	3		<u> </u>
ARE	□ 2235	Marine Economics and Policy	3		
ARE	□ 2434E	Environmental and Resource Policy	3		
ARE	☐ 3437E	Marine Fisheries Economics and Policy	3		
ARE	☐ 4438E	Valuing the Environment	3		
ARE	☐ 4462E	Environmental and Resource Economics	3	/	
ECON/MAST	□ 2467E	Economics of the Oceans	3		
ENVS/EVST/ENVE	□ 3100	Climate Resilience and Adaptation: Municipal Policy and Planning	3		
GEOG	□ 3320W	Environmental Evaluation & Assessment	3		
MAST/POLS	□ 3832	Maritime Law	3		
NRE	□ 3000	Human Dimensions of Natural Resources	3		
NRE	□ 3201	Conservation Law Enforcement	3		
NRE	☐ 3245E	Environmental Law	3		
POLS	□ 3412	Global Environmental Politics	3		
SOCI	□ 2707/W	Energy, Environment, and Society	3		

Ethics. Values. & Culture - ONE of the following:

Etimoo, varaco, a cartare		one of the following.			
Dept.	No.	Course Title	Credits	Semester/Year	Grade
ANTH	□ 3339	Cultural Designs for Sustainability	3		
ENGL	□ 2635E	Literature and the Environment	3		
ENGL	□ 3240E	American Nature Writing	3		

Dept.	No.	Course Title	Credits	Semester/Year	Grade
ENGL	☐ 3715E	Nature Writing Workshop	3		
GEOG	☐ 3410E	Human Modifications of Natural Environments	3		
GERM	□ 2400E	The Environment in German Culture	3		
HIST	□ 3540E	Environmental History of the Americas	3		
HIST	□ 3542E	New England Environmental History	3		
HIST/MAST	□ 2210E	History of the Ocean	3	,	
JOUR	□ 3046E	Environmental Journalism	3	,	
LAND	□ 2210E	The Common (Shared) Landscape of the USA	3		
PHIL	□ 3216E	Environmental Ethics	3		
SOCI	□ 2701E	Sustainable Societies	3		
SOCI	□ 2705E	Sociology of Food	3		
SOCI	☐ 2709E/WE	Society and Climate Change	3		
SOCI	□ 2707/W	Energy, Environment, and Society	3		

Economics & Business - ONE of the following:

Dept.	No.	Course Title	Credits	Semester/Year	Grade
ARE	□ 2235	Marine Economics and Policy	3		
ARE	□ 4305	Sustainable Economic Development	3		
ARE	☐ 4438E	Valuing the Environment	3		
ARE	□ 4444	Economics of Energy, Climate, and the Environment	3		
ARE	☐ 4462E	Environmental and Resource Economics	3		
ECON/MAST	□ 2467E	Economics of the Oceans	3		
ECON	□ 3466E	Environmental Economics	3		
ECON	□ 3473	Economic Development	3		

GLOBAL CHANGE CONCENTRATION

Students must complete at least two courses from each of the following Knowledge Competencies. The same course cannot be used to fulfill more than one knowledge competency.

Climate Change and its Impacts - TWO of the following:

Dept.	No.	Course Title	Credits	Semester/Year	Grade
ERTH	□ 3010	Earth History and Global Change	3		
ERTH	□ 4850	Paleoclimatology	3		
GEOG	□ 3400	Climate and Weather	3		
GEOG	□ 4300	Advanced Physical Geography/ Classic Papers in Climate Science	3	/	

Dept.	No.	Course Title	Credits	Semester/Year	Grade
MARN	□ 3000E	The Oceans and Global Climate	3		
NRE	□ 2600E	Global Sustainable Natural Resources	3		
NRE	□ 3155	Air Pollution	3		
NRE	□ 3146	Climatology	3		
NRE	□ 4170	Climate-Human-Ecosystem Interactions	3		
SPSS	☐ 2100E	Environmental Sustainability of Food Production in Developed Countries	3		
SPSS	□ 2500E	Principles and Concepts of Agroecology	3		

Land and Ocea	n Use and its I	mpacts - TWO of the following:			
Dept.	No.	Course Title	Credits	Semester/Year	Grade
EEB	☐ 2100E	Global Change Ecology	3		
EEB	□ 2222E	Plants in a Changing World	3		
EEB	□ 2208E	Introduction to Conservation Biology	3		
ERTH	□ 3020	Earth Surface Processes	3		
ERTH/MARN	□ 3230	Beaches and Coasts	3	•	
GEOG	□ 3310	Fluvial Geomorphology	3		
GEOG	☐ 3410E	Human Modifications of Natural Environments	3		
MARN	□ 3001	Foundations of Marine Sciences	4		
MARN	□ 3030	Coastal Pollution and Bioremediation	3		
MARN	□ 4066	River Influences on the Marine Environment	3		
NRE	☐ 2215E	Introduction to Water Resources	3		
NRE	□ 2345	Introduction to Fisheries and Wildlife	3		
NRE	□ 2600E	Global Sustainable Natural Resources	3		
NRE	□ 3105	Wetlands Biology and Conservation	3		
NRE	□ 3115	Air Pollution	3		
NRE	□ 4255	Water Quality Management	3		
NRE	□ 4340	Ecotoxicology	3		
NRE/ERTH	□ 4135/4735	Introduction to Ground Water Hydrology	4		

Natural Science - TWO of the following:

Naturai Scient	e - I WO OI lile	ionowing.			
Dept.	No.	Course Title	Credits	Semester/Year	Grade
CHEM	□ 4370	Environmental Chemistry – Atmosphere	3		
CHEM	□ 4371	Environmental Chemistry – Hydrosphere	3		
EEB	☐ 2244E/WE	General Ecology	4		
EEB	□ 2245/W	Evolutionary Biology	4		

Dept.	No.	Course Title	Credits	Semester/Year	Grade
EEB	□ 3247	Freshwater Ecology	4		
EEB/MARN	□ 3230/3014	Marine Biology	3		
EEB/ERTH	□ 4120	Paleobiology	4		
ERTH	□ 4110	Sedimentology and Stratigraphy	3		
ERTH	□ 4210	Glacial Processes and Materials	3		
ERTH	□ 4720	Environmental Geochemistry	3	,	
GEOG	□ 2300E	Introduction to Physical Geography	3		
MARN	□ 4030W	Chemical Oceanography	3	,	
MARN	□ 4060	Physical Oceanography	3		
MARN	☐ 4202Q	Models of the Ocean Carbon Cycle	4		
NRE	□ 2455	Forest Ecology	3		
NRE	□ 3125	Watershed Hydrology	3		
NRE	□ 3145	Meteorology	3		
NRE	□ 4205	Stream Ecology	3		
SPSS	□ 2120	Environmental Soil Science	3		
SPSS	□ 3420	Soil Chemistry Components	4		

Students must complete at least one course from each of the following Knowledge Competencies. The same course cannot be used to fulfill more than one knowledge competency.

Methods - ONE of the following:

Dept.	No.	Course Title	Credits	Semester/Year	Grade
CE	□ 2251	Probability & Statistics in Civil & Envir. Engineering	3		
CE/ENVE ERTH	□ 3530 □ 3710	Engineering and Environmental Geology	3		
EEB	□ 3266	Field Herpetology	3		
EEB	□ 4100	Big Data Science for Biologists	4		
EEB	☐ 4230W	Methods of Ecology	4	,	
EEB	□ 4262	Field Methods in Ornithology	3	/	
GEOG	☐ 3500Q	Geographic Data Analysis	4		
GEOG/ERTH	□ 4230	GIS & Remote Sensing for Geoscience Applications	3		
GEOG/MARN	□ 3505	Remote Sensing of Marine Geography	3		
ERTH	□ 4430	Stable Isotope Biogeochemistry	3		
ERTH	□ 4510	Applied and Environmental Geophysics	3		
ERTH	□ 4710	Environmental Site Assessment	3		
ERTH	□ 4810	Modeling the Changing Atmosphere and Ocean	3		

Dept.	No.	Course Title	Credits	Semester/Year	Grade
ERTH NRE	☐ 4735 ☐ <u>or</u> 4135	Introduction to Ground Water Hydrology	4		
MARN	☐ 4202Q	Models of the Ocean Carbon Cycle	4		
NRE	□ 2000	Introduction to Geomatics	4		
NRE	□ 2010	Natural Resources Measurements	3		
NRE	□ 3305	African Field Ecology & Renewable Resources Mgmt.	4		
NRE	□ 3345/W	Wildlife Management Techniques	4		
NRE	□ 3535	Remote Sensing of the Environment	3		
NRE	□ 4335	Fisheries Management	4		
NRE	□ 4475	Forest Management	4		
NRE	□ 4535	Remote Sensing Image Processing	3		
NRE	□ 4544	Land Surveying for Environmental Mgmt. & Planning	3		
NRE	□ 4575	Natural Resource Applications of GIS	4		
NRE	□ 4665	Natural Resources Modeling	3		
PHYS	□ 2400	Mathematical Methods for the Physical Sciences	3		
STAT	☐ 2215Q	Introduction to Statistics II	3		
STAT	□ 3025Q	Statistical Methods – Calculus Level 1	3		

Governance & Policy - ONE of the following:

Dept.	No.	Course Title	Credits	Semester/Year	Grade
AH	□ 3174	Environmental Laws, Regulations and Issues	3		
ARE	□ 2235	Marine Economics and Policy	3		
ARE	□ 2434E	Environmental and Resource Policy	3		
ARE	☐ 3437E	Marine Fisheries Economics and Policy	3		
ARE	☐ 4438E	Valuing the Environment	3		
ARE	☐ 4462E	Environmental and Resource Economics	3	1	
ECON/MAST	□ 2467E	Economics of the Oceans	3		
ENVS/EVST/ENVE	□ 3100	Climate Resilience and Adaptation: Municipal Policy and Planning	3		
EVST/POLS	□ 3412	Global Environmental Politics	3		
GEOG	□ 3320W	Environmental Evaluation & Assessment	3		
MAST/POLS	□ 3832	Maritime Law	3		
NRE	□ 3000	Human Dimensions of Natural Resources	3		
NRE	□ 3201	Conservation Law Enforcement	3		

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Dept.	No.	Course Title	Credits	Semester/Year	Grade
NRE	☐ 3245E	Environmental Law	3		
SOCI	□ 2707/W	Energy, Environment, and Society	3		

ENVIRONMENTAL HEALTH CONCENTRATION

ALL of the following:

Dept.	No.	Course Title	Credits	Semester/Year	Grade
AH	□ 3021	Environment, Genetics and Cancer	3	/	
AH	☐ 3175E	Environmental Health	3	/	
ANSC	□ 4341	Food Microbiology and Safety	3		
NRE	□ 4340	Ecotoxicology	3	/	

TWO of the following Dept.	No.	Course Title	Credits	Semester/Year	Grade
AH	□ 3275	HAZWOPER	3		
ENVS/EVST/ENVE	□ 3110E	Brownfield Redevelopment	3		
ERTH	□ 4710	Environmental Site Assessment	3		
MARN	□ 3030	Costal Pollution and Bioremediation	5		
МСВ	□ 2400	Human Genetics	3		
NRE	□ 3115	Air Pollution	3		
NRE	□ 4255	Water Quality Management	3		
PATH	□ 3700	Emerging Infectious Diseases and Pandemics	3		
PATH	□ 4300	Principles of Pathobiology	4		
SPSS	□ 2120	Environmental Soil Science	3		

ONE of the following:

Dept.	No.	Course Title	Credits	Semester/Year	Grade
АН	□ 3570	Health and Safety Management in the Workplace	3		
АН	□ 3571	Health Hazards in the Workplace	3	_	
АН	□ 3573	Health and Safety Standards in the Workplace	3	/	
АН	□ 3574	Ergonomics	3		
PYCH	□ 3105	Health Psychology	3		

ONE of the following:

Dept.	No.	Course Title	Credits	Semester/Year	Grade
EEB	□ 3245	Evolutionary Medicine	3		
ECON	☐ 2451/W	Economic Behavior and Health Policy	3		
GEOG	□ 3240	Health Geography: Connecting People, Place, and Health	3		

UCONN | COLLEGE OF AGRICULTURE, HEALTH AND NATURAL RESOURCES

ONLINE PLAN OF STUDY FORM ATTACHMENT

PART III: 36 CREDIT REQUIREMENT FOR ALL MAJORS¹

Each student is required to successfully complete at least 36 credits of courses that are numbered 2000-level or above in or relating to their major. These courses may also be used to meet other requirements. This group of courses must:

- 1. Total not less than 36 credits
- 2. Be numbered 2000 or above
- 3. Be approved by student's advisor and department head
- 4. Be taken at the University of Connecticut²
- 5. Include two or more departments
- 6. Include at least 15 credits from departments in the College of Agriculture, Health and Natural Resources
- 7. Have a combined Grade Point Average of at least 2.0
- 8. Not include more than 6 credits (combined) of Independent Study, Internship, or Field Studies (if included, these courses must be taken at the University of Connecticut)
- 9. Not be taken on Pass/ Fail (P@ / F@)
- 10. Not include more than 6 credits of Satisfactory/Unsatisfactory (S/U) coursework

Dept.	No.	Credits	Semester/Year	Grade	Dept.	No.	Credits	Semester/Year	Grade
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			I						
			I						
			1						

(CAHNR subject codes include AHNR, AH, ANSC, ARE, DGS, DIET, ENVS, EVST, HORT, KINS, LAND, MLSC, NRE, NUSC, PLS PATH, SOIL, SPSS, TURF)
Credits from departments in CAHNR (15 required):

¹Courses taken on Pass/Fail may NOT be used to meet any requirements.

²Residence Requirement. It is expected that advanced course work in the major will be completed at the University of Connecticut. However, students may be eligible to use up-to six credits from other institutions in the 36-credit group if approved by their advisor and department head. These credits must be identified as courses comparable to specific University of Connecticut courses and cannot include internships, special topics, or non-specific discipline credits. Transfer students must complete at least 30 credits of 2000-level or higher course work at the University of Connecticut, including at least 15 credits in College of Agriculture, Health and Natural Resources courses.