UCONN | COLLEGE OF AGRICULTURE, HEALTH AND NATURAL RESOURCES

PLAN OF STUDY FORM

Catalog Year 2022-2023 ENVIRONMENTAL SCIENCES

DIRECTIONS

- 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 Must be filed out complete on your final plan or

Department Head's Signature

Must be filed out complete on your final		Select One:	☐ Preliminar	y Plan	☐ Final Plan	
NameFirst	Middle		Last	Student I.D.: —		
Phone #:						
Current Address:	City	//Town		State	Zio Code	
Month and Year of Anticipated Graduation:	_		☐ August	☐ December		
Are you pursuing a double major in CAHNR	R: □Yes □	No	If YES, submit	Double Major Atta	achment	with final plans of study
Please list below any minors that you plan t	o earn and submit a	a final	minor plan of	study with your fin	al major p	plan of study.
At the completion of semester you intend to	graduate, will you	have o	earned 120 or	more credits? ☐	Yes	□No
Student Signature				Date		
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 fire	st-year college sequend	ce
					/	
					/	
	ENGL 1007 or 1010 or 1011				I	
	"W" Course				I	
	"W" Course (within major)					
	"Q" Course				I	
	"Q" Course (MATH or STAT)				I	
	Environmental Literacy (total 3 credits)				/	
1	Arts & Humanities (total 6 credits)					
2	Social Sciences (total 6 credits)					
3	Science & Technology (total 6 credits – include					
3	one 4-credit laboratory course)					
4	Diversity & Multiculturalism (total 6 credits – one 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		
BIOL	□ 1108	Principles of Biology II			
	□ <u>or</u> 1110	or Introduction to Botany	4		
011514	☐ 1127Q <u>and</u> 1128Q	General Chemistry I and II			
CHEM	1 ☐ or 1124Q, 1125Q and 1126Q ☐ Fundamentals of General Chemistry				
MATH	1131Q	Calculus I	4		
MATH	1132Q	Calculus II	4		
DI N/O	☐ 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	<i> </i>	
	□ 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, GEOG 2300E, ERTH 1050, and MARN 1002 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.	<i>Management –</i> No.	TWO of the following: 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	,	
NRE	□ 2600E	Global Sustainable Natural Resources	3		
NRE	□ 3105	Wetlands Biology and Conservation	3		
NRE	□ 3125	Watershed Hydrology	3	1	
NRE	□ 3155	Water Quality Management	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	□ 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/W	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	□ 3100	Climate Resilience and Adaptation: Municipal Policy and Planning			
GEOG	□ 2400E	Introduction to Sustainable Cities	3		
NRE	□ 3265	Sustainable Urban Ecosystems	3		
LAND	☐ 3230WE	Sustainable Environmental Planning & Landscape Design	3		
NRE	□ 4425	Urban and Community Forestry	3		
SPSS	□ 3550	Urban Plant Systems Construction and Maintenance	3		

Governance & Policy – ONE of the following:

Dept.	y = ONE OF THE 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	/	
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	☐ 3407/W	Energy, Environment, and Society	3		

Ethics, Values, & Culture – 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		
ENGL	□ 3715E	Nature Writing Workshop	3		

Dept.	No.	Course Title	Credits	Semester/Year	Grade
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	□ 3542	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/W	Society and Climate Change	3		
SOCI	□ 3407/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	□ 3473	Economic Development	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
GEOG	□ 3400	Climate and Weather	3		
GEOG	□ 4300	Advanced Physical Geography/ Classic Papers in Climate Science	3		
ERTH	□ 3010	Earth History and Global Change	3		
ERTH	□ 4850	Paleoclimatology	3	/	
MARN	□ 3000E	The Oceans and Global Climate	3		

Dept.	No.	Course Title	Credits	Semester/Year	Grade
NRE	□ 3115	Air Pollution	3		
NRE	□ 3146	Climatology	3		
NRE	□ 2600E	Global Sustainable Natural Resources	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 Ocean Use and its Impacts - TWO of the following:

Land and Ocean Use and its Impacts - 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		
GEOG	□ 3310	Fluvial Geomorphology	3		
GEOG	☐ 3410E	Human Modifications of Natural Environments	3	•	
ERTH	□ 3020	Earth Surface Processes	3		
ERTH/MARN	□ 3230	Beaches and Coasts	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	□ 3155	Water Quality Management	3		
NRE	□ 4340	Ecotoxicology	3		
NRE/ERTH	□ 4135/4735	Introduction to Ground Water Hydrology	4		

Natural Science - TWO of the following:

Dept.	No.	Course Title	Credits	Semester/Year	Grade
CHEM	□ 4370	Environmental Chemistry – Atmosphere	3		
CHEM	□ 4371	Environmental Chemistry – Hydrosphere	ironmental Chemistry – Hydrosphere 3		
EEB	☐ 2244E/W	General Ecology	4		
EEB	□ 2245/W	Evolutionary Biology	4		
EEB	□ 3247	Freshwater Ecology	4		
EEB/MARN	□ 3230/3014	Marine Biology	3		

Dept.	No.	Course Title	Credits	Semester/Year	Grade
EEB/ERTH	□ 4120	Paleobiology	4		
GEOG	□ 2300E	Introduction to Physical Geography	3		
ERTH	□ 4110	Sedimentology and Stratigraphy	3		
ERTH	□ 4210	Glacial Processes and Materials	3		
ERTH	□ 4720	Environmental Geochemistry	3		
MARN	□ 2002	Marine Science I	3	1	
MARN	□ 2060	Introduction to Coastal Meteorology	3		
MARN	□ 3003Q	Environmental Reaction and Transport	4	,	
MARN	□ 4030W	Chemical Oceanography	3		
MARN	□ 4060	Physical Oceanography	3		
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/	□ 3530	Engineering and Environmental Geology	3		
ERTH	□ 3710	Linging and Linvioninental Geology			
EEB	□ 3266	Field Herrpetology	3		
EEB	□ 4100	Big Data Science for Biologists	4		
EEB	☐ 4230W	Methods of Ecology	4	,	
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		
NRE	□ 4735	Introduction to Ground Water Hydrology	4		

Dept.	No.	Course Title	Credits	Semester/Year	Grade
MARN	☐ 3003Q	Environmental Reaction and Transport	4		
NRE	□ 2000	Introduction to Geomatics	troduction 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	□ 4545	Geodesy	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
АН	□ 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	,	
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		
NRE	☐ 3245E	Environmental Law	3		
SOCI	□ 3407/W	Energy, Environment, and Society	3		

ENVIRONMENTAL HEALTH CONCENTRATION

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ALL	ОΤ	τne	τοι	юw	ınq:

Dept.	No.	Course Title	Credits	Semester/Year	Grade
АН	□ 3021	Environment, Genetics and Cancer	3		
АН	☐ 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
АН	3275	HAZWOPER	3		
ENVS/EVST/ENVE	□ 3110E	Brownfield Redevelopment	3	/	
ERTH	□ 4710	Environmental Site Assessment	3		
MARN	3030	Costal Pollution and Bioremediation	5		
MCB	2400	Human Genetics	3		
NRE	□ 3115	Air Pollution	3		
NRE	□ 3155	Water Quality Management	4		
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			
AH	□ 3571	Health Hazards in the Workplace			
AH	□ 3573	Health and Safety Standards in the Workplace	3]	
AH	□ 3574	Ergonomics]	
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.	N	0.	Credits	Semester/Year	Grade
			I			_ _			I	
						_				
			I			_ _				

redits from departments in CAHNR (15 required):
CAHNR subject codes include AGNR, AH, ANSC, ARE, DGS, DIET, ENVS, EVST, HORT, KINS, LAND, MLSC, NRE, NUSC, PLSC ATH, SOIL, SPSS, TURF)
otal Credits in 36 credit group:

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.