# LCONN | COLLEGE OF AGRICULTURE, HEALTH AND NATURAL RESOURCES

#### **PLAN OF STUDY FORM**

Catalog Year 2024-2025 NATURAL RESOURCES 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 (1<sup>st</sup> 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 NATURAL RESOURCES MAJOR<sup>1</sup>

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 the following courses:

Dept.	No.	Course Title	Credits	Semester/Year	Grade
NRE	1000E	Environmental Science	3		
NRE	2000	Introduction to Geomatics	4	/	
NRE	2010	Natural Resources Measurements	3	/	
NRE	3000	Human Dimensions of Natural Resources	3	/	
NRE	4000W	Natural Resources Planning & Management	3	/	
NRE	4094	Seminar	1	/	
	□ 1107	Principles of Biology I			
BIOL	□ <u>or</u> 1108	or Principles of Biology II	4	/	
	□ <u>or</u> 1110	or Introduction to Botany			
	□ 1122	Chemical Principles and Applications			
CHEM	□ <u>or</u> 1124Q	or Fundamentals of General Chemistry I	4	/	
	□ <u>or</u> 1127Q	or General Chemistry I			
	□ 1060Q	Precalculus			
MATH	□ <u>or</u> 1131Q	or Calculus I		,	
	☐ SPSS 2120 <u>and</u> 2125	Environmental Soil Science & Soils Lab			
	☐ <u>or</u> ERTH 1050	or Earth's Dynamic Environment		,	
DI S CO	☐ 1201Q	General Physics I	4		
PHYS	□ <u>or</u> 1401Q	or General Physics with Calculus I		,	
STAT	1100Q	Elementary Concepts of Statistics	4		

Writing Competency: Students must pass NRE 4000W.

Computer Technology Competency: Students are expected to have gained additional computer technology competency in the fields of geographic information systems (GIS) and Global Positioning System (GPS) data collection and processing. Students will gain these competencies by passing NRE 2000.

Information Literacy Competency: Satisfied by required courses for major.

Natural Resource majors must also complete requirements for one or more of the following concentrations: Environmental Sustainability and Conservation (including the option for a pre-approved Education Abroad experience), Fisheries and Wildlife Conservation, Forest Resources, or Water Resources and Climate.

<sup>\*</sup>At least one course in the 36-credit group must come from a department other than NRE.

#### **ENVIRONMENTAL SUSTAINABILITY AND CONSERVATION CONCENTRATION**

ALL of the following:

Dept.	No.	Course Title	Credits	Semester/Year	Grade
	☐ ARE 1150	Principles of Agricultural & Resource Economics	3		
	☐ <u>or</u> ECON 1201	Principles of Microeconomics		,	
NRE	1235	Environmental Conservation	3		
NRE	2600E	Global Sustainable Natural Resources	3		
	☐ NRE 3245E	Environmental Law	3	,	
	☐ or ARE 2434E	Environmental and Resource Policy		,——,	

One course from each of the following four groups (the same course cannot be used to fulfill more than one group) or Education Abroad (12 credits or equivalent completed abroad of courses pre-approved by NRE).

Sustainability Concepts - ONE of the following

Dept.	No.	Course Title	Credits	Semester/Year	Grade
ANTH	□ 3339	Cultural Designs for Sustainability	3		
ENVE	□ 1000E	Environmental Sustainability	3		
NRE	□ 3265	Sustainable Urban Ecosystems	3	/	
NRE	□ 3675	Environmental and Natural Resources of China	3		
SOCI	☐ 2701E	Sustainable Societies	3		
SOCI	□ 2707/W	Energy, Environment, and Society	3		
SPSS	□ 2100E	Environ. Sustain. of Food Prod. in Developed Countries	3		

**Economics and Social Science: ONE of the following** 

Dept.	No.	Course Title	Credits	Semester/Year	Grade
ANTH	□ 3339	Cultural Designs for Sustainability	3		
ARE	□ 2235	Marine Economics and Policy	3		
ARE	☐ 4438E	Valuing the Environment	3	/	
ARE	□ 4444	Economics of Energy, Climate, and the Environment	3		
ECON	□ 2467E	Economics of the Oceans	3		
ECON	□ 3466E	Environmental Economics	3		
GEOG	□ 3320W	Environmental Evaluation and Assessment	3		
GEOG	□ 3340	Environmental Planning and Management	3		
GEOG	□ 3410E	Human Modifications of Natural Environments	3		
PHIL	☐ 3216E/WE	Environmental Ethics	3		
POLS	□ 3239	Politics of the Environment and Development	3		
POLS	□ 3412	Global Environmental Politics	3		
POLS	□ 3847	The Policy-Making Process	3		
SOCI	□ 2701E	Sustainable Societies	3		

Dept.	No.	Course Little	Credits	Semester/Year	Grade
SOCI	□ 2707/W	Energy, Environment, and Society	3		
		logic Science: ONE of the following			
Dept.	No.	Course Title	Credits	Semester/Year	Grade
EEB	2244E/WE	General Ecology	4		
EEB	□ 3247	Freshwater Ecology	4		
EEB/ MARN	□ 3230 □ 3014	Marine Biology	3		
MARN	□ 3000E	The Oceans and Global Climate	3		
NRE	□ 2455	Forest Ecology	3	/	
NRE	□ 3105	Wetlands Biology and Conservation	3		
NRE	□ 3125	Watershed Hydrology	3		
NRE	□ 3145	Meteorology	3		
NRE	□ 3146	Climatology	3		
NRE	□ 4180	Climate Change Adaptation Science	3		
NRE	□ 4205	Stream Ecology	3		
NRE	□ 4370	Population Dynamics	3		
SPSS	□ 2500E	Principles and Concepts of Agroecology	3		
Resource	Conservation	and Management: ONE of the following	,		
Dept.	No.	Course Title	Credits	Semester/Year	Grade
	No.	Course Title  Nature-based Outdoor Recreation Resource Mgmt.	Credits 3	Semester/Year	Grade
Dept.	No.			Semester/Year	Grade
Dept. NRE	No.	Nature-based Outdoor Recreation Resource Mgmt.	3	Semester/Year	Grade
Dept. NRE NRE	No.  2550  3305	Nature-based Outdoor Recreation Resource Mgmt.  African Field Ecology & Renewable Resources Mgmt.	3 4	Semester/Year	Grade
Dept. NRE NRE	No.  ☐ 2550 ☐ 3305 ☐ 3335	Nature-based Outdoor Recreation Resource Mgmt.  African Field Ecology & Renewable Resources Mgmt.  Wildlife Management	3 4 3	Semester/Year	Grade
Dept. NRE NRE NRE	No.  □ 2550 □ 3305 □ 3335 □ 4165	Nature-based Outdoor Recreation Resource Mgmt.  African Field Ecology & Renewable Resources Mgmt.  Wildlife Management  Soil and Water Management and Engineering	3 4 3 3	Semester/Year	Grade
Dept. NRE NRE NRE NRE NRE	No.  □ 2550 □ 3305 □ 3335 □ 4165 □ 4170	Nature-based Outdoor Recreation Resource Mgmt.  African Field Ecology & Renewable Resources Mgmt.  Wildlife Management  Soil and Water Management and Engineering  Climate-Human-Ecosystem Interactions	3 4 3 3 3	Semester/Year	Grade
Dept. NRE NRE NRE NRE NRE	No.  2550  3305  3335  4165  4170  4255	Nature-based Outdoor Recreation Resource Mgmt.  African Field Ecology & Renewable Resources Mgmt.  Wildlife Management  Soil and Water Management and Engineering  Climate-Human-Ecosystem Interactions  Water Quality Management	3 4 3 3 3 3	Semester/Year	Grade
Dept. NRE NRE NRE NRE NRE NRE	No.  2550  3305  3335  4165  4170  4255  4335	Nature-based Outdoor Recreation Resource Mgmt.  African Field Ecology & Renewable Resources Mgmt.  Wildlife Management  Soil and Water Management and Engineering  Climate-Human-Ecosystem Interactions  Water Quality Management  Fisheries Management	3 4 3 3 3 3 4	Semester/Year	Grade
Dept. NRE NRE NRE NRE NRE NRE NRE	No.  2550  3305  3335  4165  4170  4255  4335  4475	Nature-based Outdoor Recreation Resource Mgmt.  African Field Ecology & Renewable Resources Mgmt.  Wildlife Management  Soil and Water Management and Engineering  Climate-Human-Ecosystem Interactions  Water Quality Management  Fisheries Management  Forest Management	3 4 3 3 3 3 4 4	Semester/Year	Grade
Dept. NRE NRE NRE NRE NRE NRE NRE OR	No.    2550	Nature-based Outdoor Recreation Resource Mgmt.  African Field Ecology & Renewable Resources Mgmt.  Wildlife Management  Soil and Water Management and Engineering  Climate-Human-Ecosystem Interactions  Water Quality Management  Fisheries Management  Forest Management  Natural Resources Modeling	3 4 3 3 3 3 4 4 4 3		
Dept. NRE NRE NRE NRE NRE NRE NRE NRE NRE OR	No.  2550  3305  3335  4165  4170  4255  4335  4475  4665	Nature-based Outdoor Recreation Resource Mgmt.  African Field Ecology & Renewable Resources Mgmt.  Wildlife Management  Soil and Water Management and Engineering  Climate-Human-Ecosystem Interactions  Water Quality Management  Fisheries Management  Forest Management  Natural Resources Modeling	3 4 3 3 3 3 4 4	Semester/Year  Semester/Year	Grade
Dept. NRE NRE NRE NRE NRE NRE NRE OR	No.    2550	Nature-based Outdoor Recreation Resource Mgmt.  African Field Ecology & Renewable Resources Mgmt.  Wildlife Management  Soil and Water Management and Engineering  Climate-Human-Ecosystem Interactions  Water Quality Management  Fisheries Management  Forest Management  Natural Resources Modeling	3 4 3 3 3 3 4 4 4 3		
Dept. NRE NRE NRE NRE NRE NRE NRE OR	No.    2550	Nature-based Outdoor Recreation Resource Mgmt.  African Field Ecology & Renewable Resources Mgmt.  Wildlife Management  Soil and Water Management and Engineering  Climate-Human-Ecosystem Interactions  Water Quality Management  Fisheries Management  Forest Management  Natural Resources Modeling	3 4 3 3 3 3 4 4 4 3		
Dept. NRE NRE NRE NRE NRE NRE NRE OR	No.    2550	Nature-based Outdoor Recreation Resource Mgmt.  African Field Ecology & Renewable Resources Mgmt.  Wildlife Management  Soil and Water Management and Engineering  Climate-Human-Ecosystem Interactions  Water Quality Management  Fisheries Management  Forest Management  Natural Resources Modeling	3 4 3 3 3 3 4 4 4 3		

### FISHERIES AND WILDLIFE CONCENTRATION

ALL of the following:

Dept.	No.	Course Title	Credits	Semester/Year	Grade
EEB	2214	Biology of Vertebrates	3	/	
EEB	2244E/WE	General Ecology	4	/	
NRE	2345	Introduction to Fisheries and Wildlife	3	/	
NDE	□ 3335	Wildlife Management			
NRE	□ <u>or</u> 4335	or Fisheries Management		,	
	□ 3345/W	Wildlife Management Techniques			
NRE	☐ <u>or</u> 3385W	Fisheries Techniques	4	/	
	□ <u>or</u> 4575	or Natural Resources Applications of GIS			
NRE	4370	Population Dynamics	3		

Taxonomy/Organismal-level: ONE of the following:

Dept.	No.	Course Title	Credits	Semester/Year	Grade
ANSC	□ 1111	Principles of Animal Nutrition and Feeding	3		
ANSC	□ 3121	Principles of Animal Genetics	3		
EEB	□ 3254	Mammalogy	4		
EEB	□ 3265	Herpetology	4		
EEB	□ 4200	Biology of Fishes	4		
EEB	□ 4215	Physiological Ecology of Animals	3	1	
EEB	□ 4250	General Entomology	4		
EEB	☐ 4260 <u>or</u> 4261	Ornithology/Ornithology Lab	4		
NRE	□ 3693	Foreign Studies in Natural Resources (approved by advisor)			
NRE	□ 4340	Ecotoxicology	3		
PSYC/ EEB	□ 3201	Animal Behavior	3		
PATH	□ 2100	Anatomy and Physiology of Animals	4		
PATH	□ 4300	Principles of Pathobiology	3		

Habitat/Ecosystem-level: ONE of the following

Dept.	No.	Course Title	Credits	Semester/Year	Grade
EEB	□ 3247	Freshwater Ecology	4		
NRE	□ 2455	Forest Ecology	3		
NRE	□ 3105	Wetland Biology and Conservation	3	·	
NRE	□ 4205	Stream Ecology	3		

Dept.	No.	Course Title	Credits	Semester/Year	Grade
NRE	□ 3693	Foreign Studies in Natural Resources (approved by advisor)	1-6		

# **FOREST RESOURCES**

ALL of the following:

Dept.	No.	Course Title	Credits	Semester/Year	Grade
NRE	2415	Dendrology	3	/	
NRE	2455	Forest Ecology	3	/	
NRE	3125	Watershed Hydrology	3		
NRE	3500	Exurban Silviculture	4	/	
NRE	4475	Forest Management	4		

ONE of the following:

Dept.	No.	Course Title	Credits	Semester/Year	Grade
NRE	□ 3535	Remote Sensing of the Environment	3		
NRE	□ 4544	Land Surveying for Environmental Management and Planning	4		
NRE	□ 4575	Natural Resources Applications of GIS	4		

ONE of the following:

Dept.	No.	Course Title	Credits	Semester/Year	Grade
NRE	□ 3425	Fundamentals or Arboriculture	3		
NRE	□ 4425	Urban and Community Forestry	3		

TWO of the following:

Dept.	No.	Course Title	Credits	Semester/Year	Grade
NRE	□ 2345	Introduction to Fisheries and Wildlife	3		
NRE	□ 2550	Nature-based Outdoor Recreation Resource Mgmt.	3		
NRE	□ 3105	Wetlands Biology and Conservation	3		
NRE	☐ 3245E	Environmental Law	3		
NRE	□ 3265	Sustainable Urban Ecosystems	3		
NRE	□ 3690	Field Study Internship			
NRE	□ 3693	Foreign Studies in Natural Resources			
NRE	□ 4180	Climate Change Adaptation Science	3		

# WATER RESOURCES AND CLIMATE CONCENTRATION

ALL of the following:

Dept.	No.	Course Title	Credits	Semester/Year	Grade
NRE	2215E	Introduction to Water Resources	3		
NRE	3125	Watershed Hydrology	3		
NRE	□ 3145	Meteorology	3	1	
	□ <u>or</u> 3146	Climatology	-		

**Five additional courses from among the following groups**, including at least one from Hydrologic Science group and at least one from the Biological/Ecological Science group (whichever of NRE 3145 or 3146 is used to fulfill the above requirement cannot be used to also fulfill this requirement):

Hydrologic Science:

Dept.	No.	Course Title	Credits	Semester/Year	Grade
ENVE	□ 3120	Fluid Mechanics	4		
GEOG	□ 3310	Fluvial Geomorphology	3		
ERTH	□ 3020	Earth Surface Processes	3	/	
MARN	□ 3000E	The Oceans and Global Climate	3		
NRE	□ 4135	Introduction to Ground Water Hydrology	4		
NRE	□ 4165	Soil and Water Management and Engineering	3		
NRE	□ 4255	Water Quality Management	3		
NRE	□ 5115	Field Methods in Hydrogeology	3		

Biological/Ecological Science:

Dept.	No.	Course Title	Credits	Semester/Year	Grade
EEB	□ 3204	Aquatic Plant Biology	4		
EEB	□ 3247	Freshwater Ecology	4		
NRE	□ 3105	Wetlands Biology and Conservation	3		
NRE	□ 4205	Stream Ecology	3	/	
NRE	□ 4340	Ecotoxicology	3		

Atmospheric Science:

Dept.	No.	Course Title	Credits	Semester/Year	Grade
GEOG	□ 3400	Climate and Weather	3		
NRE	□ 3115	Air Pollution	3		
NRE	□ 3145	Meteorology	3		
NRE	□ 3146	Climatology	3	/	
NRE	□ 4170	Climate-Human-Ecosystem Interactions	3		
NRE	□ 4180	Climate Change Adaptation Science	3		

Policy:

Dept.	No.	Course Title	Cre3dits	Semester/Year	Grade
ARE	□ 2434E	Environmental and Resource Policy	3	/	
NRE	☐ 3245E	Environmental Law	3	/	

Related Skills:

-	itciated on	ms.				
	Dept.	No.	Course Title	Credits	Semester/Year	Grade
	AH	□ 3275	HAZWOPER	3		
	NRE	□ 3535	Remote Sensing of the Environment	3		
	NRE	□ 4544	Land Surveying for Environmental Mgmt. & Planning	3	-	
	NRE	□ 4575	Natural Resources Applications of GIS	4	/	

# UCONN | COLLEGE OF AGRICULTURE, HEALTH AND NATURAL RESOURCES

#### ONLINE PLAN OF STUDY FORM ATTACHMENT

### PART III: 36 CREDIT REQUIREMENT FOR ALL MAJORS<sup>1</sup>

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 Connecticut<sup>2</sup>
- 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
			I						
			I						
			I						
			I						
			I						
			I						
			1						
			I						

(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):

<sup>&</sup>lt;sup>1</sup>Courses taken on Pass/Fail may NOT be used to meet any requirements.

<sup>&</sup>lt;sup>2</sup>Residence 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.