



**PART I: GENERAL EDUCATION REQUIREMENTS (GER) <sup>1</sup>**

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.*

Content Area	Dept.	Course No.	Credits	Semester/Year	Grade
<input type="checkbox"/> Foreign Languages (3 years single language in high school) OR pass second course in first-year college sequence					
<input type="checkbox"/>				____ / ____	____
				____ / ____	____
ENGL 1010 or 1011				____ / ____	____
"W" Course				____ / ____	____
"W" Course ( <i>within major</i> )				____ / ____	____
"Q" Course				____ / ____	____
"Q" Course ( <i>MATH or STAT</i> )				____ / ____	____
Environmental Literacy (total 3 credits)				____ / ____	____
1 Arts & Humanities ( <i>total 6 credits</i> )				____ / ____	____
				____ / ____	____
2 Social Sciences ( <i>total 6 credits</i> )				____ / ____	____
				____ / ____	____
3 Science & Technology ( <i>total 6 credits – include one 4-credit laboratory course</i> )				____ / ____	____
				____ / ____	____
4 Diversity & Multiculturalism ( <i>total 6 credits – one must be "International" course</i> )				____ / ____	____
				____ / ____	____

**Computer Technology Competency:** See major requirements

**Information Literacy Competency:** See major requirements

## ENVIRONMENTAL SCIENCES

### PART II: INDIVIDUAL COURSE REQUIREMENTS OF ENVIRONMENTAL SCIENCES 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 required courses in Basic (Natural) Sciences:**

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

\*ARE 1150, ECON 1200 or 1201, GEOG 2300, GSCI 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. Approved concentrations are listed on the following pages:

## ENVIRONMENTAL SCIENCES

### 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	<input type="checkbox"/> 2208	Introduction to Conservation Biology	3	_____ / _____	
GEOG	<input type="checkbox"/> 3340	Environmental Planning and Management	3		
MARN	<input type="checkbox"/> 3030	Coastal Pollution and Bioremediation	3		
NRE	<input type="checkbox"/> 2010	Natural Resources Measurements	3		
NRE	<input type="checkbox"/> 2215	Introduction to Water Resources	3		
NRE	<input type="checkbox"/> 2345	Introduction to Fisheries and Wildlife	3		
NRE	<input type="checkbox"/> 2600	Global Sustainable Natural Resources	3		
NRE	<input type="checkbox"/> 3105	Wetlands Biology and Conservation	3		
NRE	<input type="checkbox"/> 3125	Watershed Hydrology	3		
NRE	<input type="checkbox"/> 3155	Water Quality Management	3		
NRE	<input type="checkbox"/> 3305	African Field Ecology & Renewable Resource Mgmt	4	_____ / _____	
NRE	<input type="checkbox"/> 3335	Wildlife Management	3		
NRE	<input type="checkbox"/> 3345/W	Wildlife Management Techniques	4		
NRE	<input type="checkbox"/> 3500	Exurban Silviculture	4		
NRE	<input type="checkbox"/> 3535	Remote Sensing of the Environment	3		
NRE	<input type="checkbox"/> 4335	Fisheries Management	4		
NRE	<input type="checkbox"/> 4575	Natural Resource Applications of GIS	4		

#### **Ecological Systems – TWO of the following:**

Dept.	No.	Course Title	Credits	Semester/Year	Grade
EEB	<input type="checkbox"/> 2244/W	General Ecology	_____	_____ / _____	
EEB	<input type="checkbox"/> 3247	Freshwater Ecology	4		
EEB	<input type="checkbox"/> 4230W	Methods of Ecology	4		
EEB/MARN	<input type="checkbox"/> 3230/3014	Marine Biology	3		
NRE	<input type="checkbox"/> 2255	Forest Ecology	3		
NRE	<input type="checkbox"/> 3205	Stream Ecology	3		
NRE	<input type="checkbox"/> 4340	Environmental Toxicology	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	<input type="checkbox"/> 3175	Environmental Health	3		

## ENVIRONMENTAL SCIENCES

Dept.	No.	Course Title	Credits	Semester/Year	Grade
GEOG	<input type="checkbox"/> 2400	Introduction to Sustainable Cities	3	____ / ____	____
NRE	<input type="checkbox"/> 3265	Sustainable Urban Ecosystems	3		
LAND	<input type="checkbox"/> 3230W	Environmental Planning and Landscape Design	3		

**Governance & Policy – ONE of the following:**

Dept.	No.	Course Title	Credits	Semester/Year	Grade
AH	<input type="checkbox"/> 3174	Environmental Laws, Regulations and Issues	3	____ / ____	____
ARE	<input type="checkbox"/> 2235	Marine Economics and Policy	3		
ARE	<input type="checkbox"/> 3434	Environmental and Resource Policy	3		
ARE	<input type="checkbox"/> 3437	Marine Fisheries Economics and Policy	3		
ARE	<input type="checkbox"/> 4438	Valuing the Environment	3		
ARE	<input type="checkbox"/> 4462	Environmental and Resource Economics	3		
ECON/MAST	<input type="checkbox"/> 2467	Economics of the Oceans	3		
GEOG	<input type="checkbox"/> 3320W	Environmental Evaluation & Assessment	3		
MAST/POLS	<input type="checkbox"/> 3832	Maritime Law	3		
NRE	<input type="checkbox"/> 3000	Human Dimensions of Natural Resources	3		
NRE	<input type="checkbox"/> 3201	Conservation Law Enforcement	3		
NRE	<input type="checkbox"/> 3245	Environmental Law	3		
POLS	<input type="checkbox"/> 3412	Global Environmental Politics	3		
SOCI	<input type="checkbox"/> 3407W	Energy, Environment, and Society	3		

**Ethics, Values, & Culture – ONE of the following:**

Dept.	No.	Course Title	Credits	Semester/Year	Grade
ANTH	<input type="checkbox"/> 3339	Cultural Designs for Sustainability	3	____ / ____	____
ENGL	<input type="checkbox"/> 3240	American Nature Writing	3		
ENGL	<input type="checkbox"/> 3715	Nature Writing Workshop	3		
GEOG	<input type="checkbox"/> 3410	Human Modification of Natural Environments	3		
HIST	<input type="checkbox"/> 3540	American Environmental History	3		
HIST	<input type="checkbox"/> 3542	New England Environmental History	3		
JOUR	<input type="checkbox"/> 3046	Environmental Journalism	3		
PHIL	<input type="checkbox"/> 3216	Environmental Ethics	3		
SOCI	<input type="checkbox"/> 2701	Sustainable Societies	3		
SOCI	<input type="checkbox"/> 2705	Sociology of Food	3		
SOCI	<input type="checkbox"/> 2709W	Society and Climate Change	3		
SOCI	<input type="checkbox"/> 3407W	Energy, Environment, and Society	3		

## ENVIRONMENTAL SCIENCES

### ***Economics & Business - ONE of the following:***

Dept.	No.	Course Title	Credits	Semester/Year	Grade
ARE	<input type="checkbox"/> 2235	Marine Economics and Policy	3	_____ / _____	_____
ARE	<input type="checkbox"/> 4305	Role of Agriculture and Natural Resources in Economics Development	3		
ARE	<input type="checkbox"/> 4438	Valuing the Environment	3		
ARE	<input type="checkbox"/> 4444	Economics of Energy and the Environment	3		
ARE	<input type="checkbox"/> 4462	Environmental and Resource Economics	3		
ECON	<input type="checkbox"/> 3473	Economic Development	3		
ECON/MAST	<input type="checkbox"/> 2467	Economics of the Oceans	3		
ECON	<input type="checkbox"/> 3466	Environmental Economics	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	<input type="checkbox"/> 3400	Climate and Weather	3	_____ / _____	_____
GEOG	<input type="checkbox"/> 4300	Advanced Physical Geography	3		
GSCI	<input type="checkbox"/> 3010	Earth History and Global Change	3		
MARN	<input type="checkbox"/> 3000	The Hydrosphere and Global Climate	3		
NRE	<input type="checkbox"/> 3115	Air Pollution	3	_____ / _____	_____
NRE	<input type="checkbox"/> 3146	Climatology	3		
NRE	<input type="checkbox"/> 2600	Global Sustainable Natural Resources	3		
NRE	<input type="checkbox"/> 4170	Climate-Human-Ecosystem Interactions	3		

### ***Land and Ocean Use and its Impacts - TWO of the following:***

Dept.	No.	Course Title	Credits	Semester/Year	Grade
EEB	<input type="checkbox"/> 2208	Introduction to Conservation Biology	3	_____ / _____	_____
GEOG	<input type="checkbox"/> 3310	Fluvial Geomorphology	3		
GEOG	<input type="checkbox"/> 3410	Human Modifications of Natural Environments	3		
GSCI	<input type="checkbox"/> 3020	Earth Surface Processes	3		
GSCI/MARN	<input type="checkbox"/> 3230	Beaches and Coasts	3	_____ / _____	_____
MARN	<input type="checkbox"/> 3001	Marine Sciences II	4		
MARN	<input type="checkbox"/> 3030	Coastal Pollution and Bioremediation	3		
MARN	<input type="checkbox"/> 4066	River Influences on the Marine Environment	3		
NRE	<input type="checkbox"/> 2215	Introduction to Water Resources	3		

## ENVIRONMENTAL SCIENCES

Dept.	No.	Course Title	Credits	Semester/Year	Grade
NRE	<input type="checkbox"/> 2345	Introduction to Fisheries and Wildlife	3		
NRE	<input type="checkbox"/> 2600	Global Sustainable Natural Resources	3		
NRE	<input type="checkbox"/> 3105	Wetlands Biology and Conservation	3		
NRE	<input type="checkbox"/> 3115	Air Pollution	3		
NRE	<input type="checkbox"/> 3155	Water Quality Management	3		
NRE	<input type="checkbox"/> 4340	Ecotoxicology	3		
NRE/GSCI	<input type="checkbox"/> 4135/4735	Introduction to Ground Water Hydrology	4		

**Natural Science - TWO of the following:**

Dept.	No.	Course Title	Credits	Semester/Year	Grade
CHEM	<input type="checkbox"/> 4370	Environmental Chemistry – Atmosphere	3		
CHEM	<input type="checkbox"/> 4371	Environmental Chemistry – Hydrosphere	3		
EEB	<input type="checkbox"/> 2244/W	General Ecology	4		
EEB	<input type="checkbox"/> 2245/W	Evolutionary Biology	4		
EEB	<input type="checkbox"/> 3247	Freshwater Ecology	4		
EEB/MARN	<input type="checkbox"/> 3230/3014	Marine Biology	3	_____ / _____	_____
EEB/GSCI	<input type="checkbox"/> 4120	Paleobiology	4		
GEOG	<input type="checkbox"/> 2300	Introduction to Physical Geography	3	_____ / _____	_____
GSCI	<input type="checkbox"/> 4110	Sedimentology	3		
GSCI	<input type="checkbox"/> 4210	Glacial Processes and Materials	3		
MARN	<input type="checkbox"/> 2002	Marine Science I	3		
MARN	<input type="checkbox"/> 2060	Introduction to Coastal Meteorology	3		
MARN	<input type="checkbox"/> 3003Q	Environmental Reaction and Transport	4		
MARN	<input type="checkbox"/> 4030W	Marine Biogeochemistry	3		
MARN	<input type="checkbox"/> 4060	Physical Oceanography	3		
NRE	<input type="checkbox"/> 2455	Forest Ecology	3		
NRE	<input type="checkbox"/> 3125	Watershed Hydrology	3		
NRE	<input type="checkbox"/> 3145	Meteorology	3		
NRE	<input type="checkbox"/> 3205	Stream Ecology	3		
SPSS	<input type="checkbox"/> 2120	Environmental Soil Science	3		
SPSS	<input type="checkbox"/> 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.

## ENVIRONMENTAL SCIENCES

**Methods - ONE of the following:**

Dept.	No.	Course Title	Credits	Semester/Year	Grade
CE	<input type="checkbox"/> 2251	Probability and Statistics in Civil Engineering	3	/	
CE/ENVE/ GSCI	<input type="checkbox"/> 3530 <input type="checkbox"/> 3710	Engineering and Environmental Geology	3		
EEB	<input type="checkbox"/> 3266	Field Herpetology	3		
EEB	<input type="checkbox"/> 4230W	Methods of Ecology	4		
EEB	<input type="checkbox"/> 4262	Field Methods of Ornithology	3		
GEOG	<input type="checkbox"/> 3500Q	Geographic Data Analysis	4		
GEOG/GSCI	<input type="checkbox"/> 4230	GIS & Remote Sensing for Geoscience Applications	3		
GEOG/MARN	<input type="checkbox"/> 3505	Remote Sensing of Marine Geography	3		
GSCI/NRE	<input type="checkbox"/> 4735 <input type="checkbox"/> 4135	Introduction to Ground-Water Hydrology	4		
MARN	<input type="checkbox"/> 3003Q	Environmental Reaction and Transport	4		
NRE	<input type="checkbox"/> 2000	Introduction to Geomatics	4		
NRE	<input type="checkbox"/> 2010	Natural Resources Measurements	3		
NRE	<input type="checkbox"/> 3305	African Field Ecology & Renewable Resource Mgmt	4		
NRE	<input type="checkbox"/> 3345/W	Wildlife Management Techniques	4		
NRE	<input type="checkbox"/> 3535	Remote Sensing of the Environment	3		
NRE	<input type="checkbox"/> 4335	Fisheries Management	4		
NRE	<input type="checkbox"/> 4475	Forest Management	4		
NRE	<input type="checkbox"/> 4535	Remote Sensing Image Processing	3		
NRE	<input type="checkbox"/> 4544	Application of Surveying for Natural Resources	3		
NRE	<input type="checkbox"/> 4545	Geodesy	3		
NRE	<input type="checkbox"/> 4575	Natural Resource Applications of GIS	4		
NRE	<input type="checkbox"/> 4665	Natural Resources Modeling	3		
PHYS	<input type="checkbox"/> 2400	Mathematical Methods for the Physical Sciences	3		
STAT	<input type="checkbox"/> 2215Q	Introduction to Statistics II	3		
STAT	<input type="checkbox"/> 3025Q	Statistical Methods – Calculus Level 1	3		

**Governance & Policy - ONE of the following:**

Dept.	No.	Course Title	Credits	Semester/Year	Grade
AH	<input type="checkbox"/> 3174	Environmental Laws, Regulations and Issues	3		
ARE	<input type="checkbox"/> 2235	Marine Economics and Policy	3		
ARE	<input type="checkbox"/> 3434	Environmental and Resource Policy	3		
ARE	<input type="checkbox"/> 3437	Marine Fisheries Economics and Policy	3		
ARE	<input type="checkbox"/> 4438	Valuing the Environment	3		



## ENVIRONMENTAL SCIENCES

Dept.	No.	Course Title	Credits	Semester/Year	Grade
ARE	<input type="checkbox"/> 4462	Environmental and Resource Economics	3	_____ / _____	_____
ECON/MAST	<input type="checkbox"/> 2467	Economics of the Oceans	3		
EVST/POLS	<input type="checkbox"/> 3412	Global Environmental Politics	3		
GEOG	<input type="checkbox"/> 3320W	Environmental Evaluation & Assessment	3		
MAST/POLS	<input type="checkbox"/> 3832	Maritime Law	3		
NRE	<input type="checkbox"/> 3000	Human Dimensions of Natural Resources	3		
NRE	<input type="checkbox"/> 3201	Conservation Law Enforcement	3		
NRE	<input type="checkbox"/> 3245	Environmental Law	3		
SOCI	<input type="checkbox"/> 3407/W	Energy, Environment, and Society	3		

## HUMAN HEALTH CONCENTRATION

### *ALL of the following:*

Dept.	No.	Course Title	Credits	Semester/Year	Grade
AH	<input type="checkbox"/> 3021	Environment, Genetics and Cancer	3	_____ / _____	_____
AH	<input type="checkbox"/> 3175	Environmental Health	3	_____ / _____	_____
AH	<input type="checkbox"/> 3275	HAZWOPER	3	_____ / _____	_____
ANSC	<input type="checkbox"/> 4341	Food Microbiology and Safety	3	_____ / _____	_____
MCB	<input type="checkbox"/> 2610	Fundamentals of Microbiology	4	_____ / _____	_____

### *TWO of the following totaling 6 or more credits:*

Dept.	No.	Course Title	Credits	Semester/Year	Grade
ANSC	<input type="checkbox"/> 4642	Food Microbiology Laboratory	1	_____ / _____	_____
MCB	<input type="checkbox"/> 2400	Human Genetics	3		
MCB	<input type="checkbox"/> 3010	Biochemistry	5		
MCB	<input type="checkbox"/> 3011	Human Metabolism and Disease	2		
MCB	<input type="checkbox"/> 3201	Gene Expression	3		
MCB	<input type="checkbox"/> 3633	Pathogenic Microbiology	4		
MCB	<input type="checkbox"/> 4211	Basic Immunology	3		
PVS	<input type="checkbox"/> 2100	Anatomy and Physiology of Animals	4		

### *ONE of the following:*

Dept.	No.	Course Title	Credits	Semester/Year	Grade
AH	<input type="checkbox"/> 3570	Health and Safety Management in the Workplace	3	_____ / _____	_____
AH	<input type="checkbox"/> 3571	Health Hazards in the Workplace	3		
AH	<input type="checkbox"/> 3573	Health and Safety Standards in the Workplace	3		
AH	<input type="checkbox"/> 3574	Ergonomics	3		
PVS	<input type="checkbox"/> 4300	Principles of Pathobiology	3		

# 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
_____	_____	_____	_____/____	_____
_____	_____	_____	_____/____	_____
_____	_____	_____	_____/____	_____
_____	_____	_____	_____/____	_____
_____	_____	_____	_____/____	_____
_____	_____	_____	_____/____	_____
_____	_____	_____	_____/____	_____
_____	_____	_____	_____/____	_____
_____	_____	_____	_____/____	_____
_____	_____	_____	_____/____	_____
_____	_____	_____	_____/____	_____
_____	_____	_____	_____/____	_____

Credits 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, PVS, SOIL, SPSS, TURF)

Total Credits in 36 credit group: \_\_\_\_\_

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

<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.