# ENVS Global Change Concentration Course List

## Knowledge Competencies

### Land and Ocean Use & its Impacts (2 of the Following)
- EEB 2208 Introduction to Conservation Biology
- GEOG 3310 Fluvial Geomorphology
- GEOG 3410 Human Modifications of Natural Environments
- GSCI 3020 Earth Surface Processes
- GSCI/MARN 3230 Beaches and Coasts
- MARN 3001 Coastal Systems Science II
- MARN 3030 Coastal Pollution and Bioremediation
- MARN 4066 River Influences on the Marine Environment
- NRE 2215 Introduction to Water Resources
- NRE 2345 Introduction to Fisheries and Wildlife
- NRE 2600 Global Sustainable Natural Resources
- NRE 3105 Wetlands Biology and Conservation
- NRE 3115 Air Pollution
- NRE 3155 Water Quality Management
- NRE 4135/GSCI 4735 Introduction to Groundwater Hydrology
- NRE 4340 Ecotoxicology

### Natural Science (2 of the following)
- CHEM 4370 Environmental Chemistry - Atmosphere
- CHEM 4371 Environmental Chemistry - Hydrosphere
- EEB 2244/W General Ecology
- EEB 2245/W Evolutionary Biology
- EEB 3230/MARN 3014 Marine Biology
- EEB 3247 Freshwater Ecology
- EEB/GSCI 4120 Paleobiology
- GEOG 2300 Introduction to Physical Geography
- GSCI 4110 Sedimentology
- GSCI 4210 Glacial Processes and Materials
- MARN 2002 Marine Science I
- MARN 2060 Introduction to Coastal Meteorology
- MARN 3003Q Environmental Reaction and Transport
- MARN 4030W Marine Biogeochemistry
- MARN 4060 Physical Oceanography
- NRE 2455 Forest Ecology
- NRE 3125 Watershed Hydrology
- NRE 3145 Meteorology
- NRE 3205 Stream Ecology
- SPSS 2120 Environmental Soil Science
- SPSS 3420 Soil Chemistry Components

### Climate Change & its Impacts (2 of the following)
- GEOG 3400 Climate and Weather
- GEOG 4300 Advanced Physical Geography
- GSCI 3010 Earth History and Global Change
- MARN 3000 The Hydrosphere and Global Climate
- NRE 2600 Global Sustainable Natural Resources
- NRE 3115 Air Pollution
- NRE 3146 Climatology
- NRE 4170 Climate-Human-Ecosystem Interactions

### Governance & Policy (1 of the following)
- AH 3174 Environmental Laws, Regulations and Issues
- ARE 2235 Marine Economics and Policy
- ARE 3434 Environmental and Resource Policy
- ARE 3437 Marine Fisheries Economics and Policy
- ARE 4438 Valuing the Environment
- ARE 4462 Environmental and Resource Economics
- ECON/MAST 2467 Economics of the Oceans
- EVST/POLS 3412 Global Environmental Politics
- GEOG 3320W Environmental Evaluation and Assessment
- MAST/POLS 3832 Maritime Law
- NRE 3000 Human Dimensions of Natural Resources
- NRE 3201 Conservation Law Enforcement
- NRE 3245 Environmental Law
- SOCI 3407/W Energy Environment and Society

## Methods (1 of the following)
- CE 2251 Probability and Statistics in Civil Engineering
- CE/ENVS 3530/ GSCI 3710 Engineering and Environmental Geology
- EEB 3266 Field Herpetology
- EEB 4230W Methods of Ecology
- EEB 4262 Field Methods in Ornithology
- GEOG 3500Q Geographic Data Analysis
- GEOG/GSCI 4230 GIS and Remote Sensing for Geoscience Applications
- GEOG/MARN 3505 Remote Sensing of Marine Geography
- GSCI 4735/NRE 4135 Introduction to Ground-Water Hydrology
- MARN 3003Q Environmental Reaction and Transport
- NRE 2000 Introduction to Geomatics
- NRE 2010 Natural Resources Measurements
- NRE 3305 African Field Ecology and Renewable Resources Management
- NRE 3345/W Wildlife Management Techniques
- NRE 3355 Remote Sensing of the Environment
- NRE 4335 Fisheries Management
- NRE 4475 Forest Management
- NRE 4535 Remote Sensing Image Processing
- NRE 4544 Application of Surveying for Natural Resources
- NRE 4545 Geodesy
- NRE 4575 Natural Resource Applications of GIS
- NRE 4665 Natural Resources Modeling
- PHYS 2400 Mathematical Methods for Physical Sciences
- STAT 2215Q Introduction to Statistics II
- STAT 3025Q Statistical Methods (Calculus Level I)

*Courses cannot be used to fulfill more than one competency.*