**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

HORT 3765 Phytotechnology: Use for Plants for Ecosystem Services

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 2325 Fish and Fisheries Conservation

NRE 2345 Introduction to Fisheries and Wildlife

NRE 3105 Wetlands Biology and Conservation

NRE 3115 Air Pollution

NRE 4135/GSCI 4735 Introduction to Groundwater Hydrology

NRE 4340 Environmental Toxicology

**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

MARN 2002 Coastal Systems 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

SOIL 2120 Environmental Soil Science

SOIL 3410 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 3115 Air Pollution

NRE 3146 Climatology

NRE 4170 Climate-Human-Ecosystem Interactions

**Methods (1 of the following)**

EEB 4230W Methods of Ecology

ENVE 2251 Probability and Statistics in Civil and Environmental Engineering

GEOG 3300 Principles and Applications of Physical Geography

GEOG 3500Q Geographic Data Analysis

GEOG/GSCI 4230 GIS and Remote Sensing for Geoscience Applications

GEOG/MARN 3505 Remote Sensing of Marine Geography

GSCI 3710 Engineering and Environmental Geology

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 3535 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 Geographic Information Systems

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)

**Governance & Policy (1 of the following)**

AH 3174 Environmental Laws, Regulations and Issues

ARE 3235 Marine Resource and Environmental Economics

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

GEOG 3320W Environmental Evaluation and Assessment

MAST/POLS 3832 Maritime Law

NRE 3201 Conservation Law Enforcement

NRE 3245 Environmental Law

NRE 3000 Human Dimensions of Natural Resources

POLS/EVST 3412 Global Environmental Politics

SOCI 3407/W Energy Environment and Society

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