**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

**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 3246 Human Dimensions of Natural Resources
- POLS 3412 Global Environmental Politics
- SOCI 3407/W Energy Environment and Society

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