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/ENVE 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 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 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.