

## Proposed pre-approved related courses for EEB majors

Note that some of these courses have restricted enrollment or pre-requisites outside of biology. Pre-approved courses include most MCB and PNB courses and others in the areas of applied ecology, environmental issues and sustainability, physical processes that affect ecological systems, and skills useful in the study of ecology and evolutionary biology.

### *Allied Health (AH)*

AH 3174. Environmental Laws, Regulations and Issues

AH 3175. Environmental Health

AH 3320. Introduction to Infectious Diseases

### *Animal Science (ANSC)*

ANSC 3122. Reproductive Physiology

ANSC 3311. Comparative Exercise Physiology

ANSC 3313. Growth Biology and Metabolism in Domestic Livestock

ANSC 4311. Advanced Animal Nutrition

### *Anthropology (ANTH)*

ANTH 2502. Human Evolution

ANTH 3200. Human Behavioral Ecology

ANTH 3300. Medical Anthropology

ANTH 3302. Medical Ecology

ANTH 3340. Culture and Conservation

ANTH 3522. Ecological Anthropology Seminar

ANTH 3703. Zooarchaeological Method and Theory

ANTH 3705. Paleoanthropology

ANTH 3706. Archaeobotany

### *Agricultural and Resource Economics (ARE)*

ARE 3150. Applied Resource Economics

ARE 3235. Marine Resource and Environmental Economics

ARE 3434. Environmental and Resource Policy

ARE 3437. Marine Fisheries Economics and Policy

ARE 3440W. Writing in Environmental and Resource Policy

ARE 4444. Economics of Energy, Climate, and the Environment

ARE 4438. Valuing the Environment

### *Chemistry (CHEM)*

CHEM 2241. Organic Chemistry

CHEM 2242. Organic Chemistry Lab

CHEM 2443. Organic Chemistry

CHEM 2444. Organic Chemistry

CHEM 2445. Organic Chemistry Lab  
CHEM 4370. Environmental Chemistry – Atmosphere  
CHEM 4371. Environmental Chemistry – Hydrosphere

*Cognitive Science (COGS)*

COGS 2201. Foundations of Cognitive Science

*Economics (ECON)*

ECON 2467. Economics of the Oceans  
ECON 3466. Environmental Economics

*Environmental Sciences (ENVS)*

ENVS 2000. Integrating Humans and the Environment

*Environmental Studies (EVST)*

EVST 3340. Culture and Conservation  
EVST 3412. Global Environmental Politics

*Geography (GEOG)*

GEOG 2300. Introduction to Physical Geography  
GEOG 2320. Climate Change: Current Geographic Issues  
GEOG 2400. Introduction to Sustainable Cities  
GEOG 2410. New Digital Worlds of Geographic Information Science  
GEOG 2500. Introduction to Geographic Information Systems  
GEOG 2505. Applications of Geographic Information Systems  
GEOG 3320W. Environmental Evaluation and Assessment  
GEOG 3330W. Environmental Restoration  
GEOG 3340. Environmental Planning and Management  
GEOG 3350. Global Change, Local Action: A Geography of Environmentalism  
GEOG 3400. Climate and Weather  
GEOG 3410. Human Modifications of Natural Environments  
GEOG 3505. Remote Sensing of Marine Geography  
GEOG 4220. Population Geography

*Geoscience (GSCI)*

GSCI 2310. National Parks Unearthed: Geology and Landscapes through Time  
GSCI 2500. Earth System Science  
GSCI 3010. Earth History and Global Change  
GSCI 3020. Earth Surface Processes  
GSCI 3230. Beaches and Coasts  
GSCI 4050W. Geoscience and Society  
GSCI 4110. Sedimentology  
GSCI 4130. Geomicrobiology

GSCI 4735. Introduction to Ground-Water Hydrology

*History (HIST)*

HIST 2206. History of Science

HIST 3540. American Environmental History

HIST 3542. New England Environmental History

*Journalism (JOUR)*

JOUR 3046. Environmental Journalism

*Landscape Architecture (LAND)*

LAND 3230W. Environmental Planning and Landscape Design

*Marine Sciences (MARN)*

MARN 2002. Marine Sciences I

MARN 2060. Introduction to Coastal Meteorology

MARN 3000. The Hydrosphere and Global Climate

MARN 3001. Marine Sciences II

MARN 3003Q. Environmental Reaction and Transport

MARN 3012. Marine Invertebrate Biology

MARN 3015. Molecular Approaches to Biological Oceanography

MARN 3016. Marine Microbiology

MARN 3017. Plankton Ecology

MARN 3030. Coastal Pollution and Bioremediation

MARN 3060. Coastal Circulation and Sediment Transport

MARN 3061. Environmental Fluid Dynamics

MARN 3230. Beaches and Coasts

MARN 3505. Remote Sensing of Marine Geography

MARN 3801W. Marine Sciences and Society

MARN 3811. Seminar on Marine Mammals

MARN 4001. Measurement and Analysis in Coastal Ecosystems

MARN 4002. Science and the Coastal Environment

MARN 4010. Biological Oceanography

MARN 4018. Ecology of Fishes

MARN 4030W. Chemical Oceanography

MARN 4050. Geological Oceanography

MARN 4060. Physical Oceanography

MARN 4066. River Influences on the Marine Environment

MARN 4160. Scientific Diving

*Mathematics (MATH)*

MATH 2110Q. Multivariable Calculus

MATH 2130Q. Honors Multivariable Calculus

MATH 2141Q-2142Q. Advanced Calculus I, II  
MATH 2143Q-2144Q. Advanced Calculus III, IV  
MATH 2210Q. Applied Linear Algebra  
MATH 2410Q. Elementary Differential Equations  
MATH 2420Q. Honors Differential Equations

*Molecular and Cell Biology (MCB)*

MCB 2000. Introduction to Biochemistry  
MCB 2210. Cell Biology  
MCB 2225. Cell Biology Laboratory  
MCB 2410. Genetics  
MCB 2610. Fundamentals of Microbiology  
MCB 3007. Introduction to Biophysical Chemistry  
MCB 3010. Biochemistry  
MCB 3201. Gene Expression  
MCB 3210. Molecular Endocrinology  
MCB 3211. Cancer Cell Biology and Genetics  
MCB 3219. Developmental and Regenerative Biology  
MCB 3246. Virology  
MCB 3412. Genetic Engineering and Functional Genomics  
MCB 3413. Concepts of Genetic Analysis  
MCB 3421. Introduction to Molecular Evolution and Bioinformatics  
MCB 3602W. Introduction to Bioinformatic Tools for Microbial Genome Annotation  
MCB 3617. Molecular Biology and Genetics of Prokaryotes  
MCB 3633. Pathogenic Microbiology  
MCB 3637. Practical Methods in Microbial Genomics  
MCB 4008. Techniques of Biophysical Chemistry  
MCB 4009. Structure and Function of Biological Macromolecules  
MCB 4026W. Advanced Biochemistry Laboratory  
MCB 4211. Basic Immunology  
MCB 4601. Physiology of Archaea and Bacteria  
MCB 4624. Experiments in Bacterial Genetics

*Natural Resources and the Environment (NRE)*

NRE 2000. Introduction to Geomatics  
NRE 2010. Natural Resources Measurements  
NRE 2215. Introduction to Water Resources  
NRE 2345. Introduction to Fisheries and Wildlife  
NRE 2415. Dendrology  
NRE 2455. Forest Ecology  
NRE 2600. Global Sustainable Natural Resources  
NRE 3000. Human Dimensions of Natural Resources  
NRE 3105. Wetlands Biology and Conservation

NRE 3115. Air Pollution  
NRE 3125. Watershed Hydrology  
NRE 3145. Meteorology  
NRE 3146. Climatology  
NRE 3155. Water Quality Management  
NRE 3201. Conservation Law Enforcement  
NRE 3205. Stream Ecology  
NRE 3245. Environmental Law  
NRE 3265. Sustainable Urban Ecosystems  
NRE 3335. Wildlife Management  
NRE 3345. Wildlife Management Techniques  
NRE 3345W. Wildlife Management Techniques  
NRE 3365. Private Lands Wildlife Management  
NRE 3500. Exurban Silviculture  
NRE 3535. Remote Sensing of the Environment  
NRE 3674. Introduction to Environmental and Natural Resources of China  
NRE 3675. Environmental and Natural Resources of China  
NRE 4000W. Natural Resources Planning and Management  
NRE 4135. Introduction to Ground-Water Hydrology  
NRE 4165. Soil and Water Management and Engineering  
NRE 4170. Climate-Human-Ecosystem Interactions  
NRE 4335. Fisheries Management  
NRE 4340. Environmental Toxicology  
NRE 4370. Population Dynamics  
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 4601. Current Topics in Environmental and Natural Resources – Honors  
NRE 4665. Natural Resources Modeling

*Nutritional Sciences (NUSC)*

NUSC 2200. Nutrition and Human Development

*Philosophy (PHIL)*

PHIL 2170W. Bioethics and Human Rights in Cross-Cultural Perspective

PHIL 3216. Environmental Ethics

PHIL 3216W. Environmental Ethics

*Physics (PHYS)*

PHYS 3101. Mechanics I

PHYS 3102. Mechanics II

*Plant Science (PLSC/SPSS)*

- PLSC 2100. Environmental Sustainability of Food Production in Developed Countries
- PLSC 2500. Principles and Concepts of Agroecology
- PLSC 3055. Genetically Engineered Crops from Farm to Fork
- PLSC 3210. Molecular Laboratory Technology
- PLSC 3230. Biotechnology – Science, Application, Impact, Perception
- PLSC 3240. Plant Biotechnology
- PLSC 3250. Plant Gene Transfer Techniques
- PLSC 3810. Fundamentals of Plant Pathology
- PLSC 3820. Ecology and Control of Weeds
- PLSC 3830. Insect Pests of Ornamentals and Turf
- PLSC 3840. Integrated Pest Management
- PLSC 4210. Plant Physiology: How Plants Work
- PLSC 4215. Plant Physiology Lab: Investigations into How Plants Work

*Physiology and Neurobiology (PNB)*

- PNB 2250. Animal Physiology
- PNB 2264-2265. Human Physiology and Anatomy
- PNB 2274-2275. Enhanced Human Physiology and Anatomy
- PNB 3251. Biology of the Brain
- PNB 3252. Physiological Model Systems
- PNB 3260. Stem Cell Biology
- PNB 3262. Mammalian Endocrinology
- PNB 3263WQ. Investigations in Neurobiology
- PNB 3264W. Molecular Principles of Physiology
- PNB 3265. Comparative Endocrinology
- PNB 3270. Molecular Endocrinology
- PNB 3275. Biology of Synaptic Transmission
- PNB 3276. Molecular Neuroanatomy
- PNB 3340. Non-coding RNAs in Human Physiology and Disease
- PNB 3350. Membrane Transport in Health and Disease
- PNB 3500. Cardiorespiratory Physiology
- PNB 3700. Sensory Physiology
- PNB 4162. Neuroethology

*Political Science (POLS)*

- POLS 3209. Sustainable Energy in the 21<sup>st</sup> Century
- POLS 3412. Global Environmental Politics

*Psychological Sciences (PSYC)*

- PSYC 2200. Physiological Psychology
- PSYC 2500. Learning

PSYC 3104. Environmental Psychology  
PSYC 3200. Introduction to Behavioral Genetics  
PSYC 3200W. Introduction to Behavioral Genetics  
PSYC 3253. Sensory Neuroscience Laboratory  
PSYC 3270. Current Topics in Behavioral Neuroscience

*Public Health (PUBH)*

PUBY 3001. Introduction to Epidemiology

*Pathobiology and Veterinary Science (PVS)*

PVS 3100. Histologic Structure and Function  
PVS 3201. Principles of Animal Virology  
PVS 3201W. Principles of Animal Virology  
PVS 3341. Pathobiology of the Avian Species  
PVS 3501. Diagnostic Techniques for the Biomedical Sciences  
PVS 3700. Emerging Infectious Diseases  
PVS 4300. Principles of Pathobiology

*Speech, Language and Hearing Sciences (SLHS)*

SLHS 2203. Anatomy and Physiology of Speech and Hearing

*Sociology (SOC)*

SOCI 2709W. Society and Climate Change  
SOC 3407/W. Energy, Environment, and Society  
SOC 3971/W. Population

*Soil Science (SOIL)*

SOIL 2120. Environmental Soil Science  
SOIL 2125. Soils Lab  
SOIL 3410. Soil Chemistry Components  
SOIL 3620. Soil Fertility  
SOIL 4420. Soil Chemistry Processes

*Statistics (STAT)*

STAT 2215Q. Introduction to Statistics II  
STAT 3025Q. Statistical Methods (Calculus Level I)  
STAT 3115Q. Analysis of Experiments  
STAT 3375Q. Introduction to Mathematical Statistics I  
STAT 3445. Introduction to Mathematical Statistics II  
STAT 3515Q. Design of Experiments  
STAT 3675Q. Statistical Computing  
STAT 3965. Elementary Stochastic Processes  
STAT 4525. Sampling Theory

STAT 4625. Introduction to Biostatistics

STAT 4675. Probability and Statistics Problems

STAT 4825. Applied Time Series

STAT 4875. Nonparametric Methods

*Women's Gender, and Sexuality Studies (WGSS)*

WGSS 2105/W. Gender and Science.