BACHELOR OF SCIENCE IN ENVIRONMENTAL EDUCATION AND INTERPRETATION

Environmental Education teaches people of all ages about the natural environment, so that they can make informed decisions on how to care for it.

Interpretation is a communications process that reveals meanings and relationships about natural, cultural, historical, and recreational resources. Interpretation and environmental education work hand-in-hand to help make connections between the world of science and the public. Through the art of interpretation, students will learn how to help people make connections with the natural world and science through educational programs and materials.

Required Courses

APM 104	College Algebra & PreCalculus	3
OR		
APM 105	Survey Of Calc & Appl I	4
APM 391	Intro/Probability&Stats	3
EFB 101	Gen Bio I:Organismal Bio&Ecol	3
EFB 102	General Biology I Laboratory	1
EFB 103	Gen Bio II:Cell Bio & Genetics	3
EFB 104	General Biology II Laboratory	1
EFB 120	The Global Envirnmnt & Society	3
EFB 210	Diversity of Life I	3
EFB 211	Diversity of Life II	3
EFB 320	General Ecology	4
EST 132	Orientation Seminar:EST	1
EST 133	Intro to Environmental Studies	3
EST 361	History/Am Envrn Movement	3
EST 370	Intro/Pers Env Interp Methods	3
EST 407	Assessment for Env Programs	3
EST 415	Environmental Justice	3
EST 444	Creative Responses to the Env	3

EST 471	Non-Personal Envrn Interp Meth	3
EST 494	Sr. Seminar in Envrn Studies	1
EST 499	Envrn Studies Internship	1 - 12
EWP 190	Writing And The Envrnment	3
EWP 290	Research Writing & Humanities	3
FCH 150	General Chemistry I	3
FCH 151	General Chemistry I Lab	1
FOR 372	Fund/Outdoor Recreation	3

Electives

Course	Codes*	Credits
General Education Course in one of the following categories:The Arts, Western Civilization, Other World Civilizations, Foreign Language	G	3
Directed Electives		30
Open Electives		24

Directed Electives: Environmental Education & Interpretation

1. **Conservation Biology and Resource Management**
   At least 6 credits hours must be in the subject area of advanced conservation biology and Management. Allowable courses are listed below. The list may vary slightly from year to year.
   - EFB 370 Population Ecology and Management
   - EFB 390 Wildlife Ecology & Management (4 cr.) F
   - EFB 413 Introduction to Conservation Biology (4 cr.) S
   - EFB 423 Marine Biology (4 cr.) S even years
   - EFB 487 Fisheries Science and Management (3 cr.) F
   - EST 220 Urban Ecology (3 cr.) F
   - FOR 332 Forest Ecology (4 cr.) F
   - FOR 404 Ecotourism Abroad (3 cr.) S
   - FOR 475 Recreation Behavior and Management (3 cr.) F
   - FOR 476 Ecotourism and Nature Tourism (3 cr.) F

2. **Advanced Communication**
   At least 6 credit hours must be in the subject area of advanced communication. Allowable courses are listed below. The list may vary slightly from year to year.
   - EST 395 Public Communication of Science and Technology (3 cr.) S
   - EST 493 Environmental Communication WOrkshop (3 cr.) S
   - EWP 390 Literature of Nature (3 cr.) F, S
   - EWP 394 The Art of Storytelling (3 cr.) F
   - EWP 407 Writing for Environmental and Science Professionals (3 cr.) F, S
   - EWP 420 Public Presentation Skills (3 cr.) F, S
   - EWP 450 Digital Storytelling (3 cr.) F, S
   - EWP 494 Creative Non-fiction in the Sciences (3 cr.) S
   - LSA 300 Digital Methods and Graphics I (3 cr.) F
3. **Advanced Environmental Education and Interpretation**
   At least 3 credit hours must be in the subject area of advanced interpretation. Allowable courses are listed below. The list may vary slightly from year to year.
   - EST 333 Inquiry-Based Science Education (3 cr.) S
   - EST 472 Natural History Museums and Modern Science (3 cr.) Maymester
   - EST 474 Advanced Interpretation and Environmental Education (3 cr.) S

4. **Organismal Diversity**
   To encourage breadth in organism-level biology, students must complete 12 credit hours in any combination from this list.
   - **Environmental Biology**
     - EFB 202 Ecological Monitoring & Bio Assess (3 cr.) CLBS Summer
   - **Earth Sciences**
     - EST 231 Environmental Geology (3 cr.) S
     - FOR 338 Meteorology (3 cr.) S
     - FOR 340 Watershed Hydrology (3 cr.) S
     - FOR 345 Introduction to Soils (3 cr.) F
     - FOR 442 Watershed Ecology and Management (3 cr.) F
     - Diversity of Microorganisms
     - EFB 303 Introductory Environmental Microbiology (4 cr.) F
     - EFB 340 Forest and Shade Tree Pathology (3 cr.) S
     - EFB 342 Fungal Diversity and Ecology (3 cr.) CLBS
     - EFB 428 Mycorrhizal Ecology (3cr.) F, even years
     - EFB 440 Mycology (3 cr.) F
   - **Diversity of Plants**
     - EFB 326 Plant Evolution, Diversification and Conservation (3 cr.) S
     - EFB 327 Adirondack Flora (3 cr.) CLBS
     - EFB 336 Dendrology (3 cr.) F
     - EFB 337 Field Ethnobotany (3 cr.) CLBS
     - EFB 435 Flowering Plants: Diversity, Evolution, and Systematics (3 cr.) F
     - EFB 446 Ecology of Mosses (3 cr.) S
     - EFB 496 Flora of Central NY (3 cr.) Maymester
     - EFB 496 Wetland Plants & Communities of Adirondacks (3 cr.) CLBS
   - **Diversity of Invertebrate Animals**
     - EFB 351 Principles of Forest Entomology (3 cr.) S
     - EFB 352 Elements of Entomology (3 cr.) F
     - EFB 355 Invertebrate Zoology (4 cr.) S
     - EFB 453 Parasitology (3 cr.) F
     - EFB 554 Aquatic Entomology (3 cr.) F
   - **Diversity of Vertebrate Animals**
     - EFB 388 Ecology of Adirondack Fishes (3 cr.) CLBS
     - EFB 482 Ornithology (4 cr.) S
     - EFB 483 Mammal Diversity (4 cr.) F
     - EFB 484 Winter Mammalian Ecology (3 cr.) S
     - EFB 485 Herpetology (3 cr.) S
     - EFB 486 Ichthyology (3 cr.) S
5. **Diversity, Equity, Inclusion and Social Justice**
   At least 3 credit hours are required in this subject area related to the inclusion of diverse perspectives in Environmental Education and Interpretation.

   - Refer to general education list for DEISJ approved courses

Total Minimum Credits For Degree: 123