PALEOBIOLOGY MINOR (GEOL)

Program Director: John Merck, Ph.D.

The minor in Paleobiology will provide students with a broad understanding of the application of the methods of biology and geology to the study of the history of life, and develop students' appreciation of how issues in the study of paleobiology connect with larger trends in those sciences. It is intended for all students with an interest in the study of the history of life, be it professional or avocational.

REQUIREMENTS

Depending on optional course(s) taken, a total of 21 – 24 credits are required (see prerequisites (p. 1)). All courses presented for the minor must be passed with a grade of C- or better.

Course	Title	Credits
Fundamental Courses		
BSCI160 & BSCI161	Principles of Ecology and Evolution and Principles of Ecology and Evolution Lab	4
One of the following:		4
GEOL100 & GEOL110	Physical Geology and Physical Geology Laboratory	
GEOL120 & GEOL110	Environmental Geology and Physical Geology Laboratory	
Introductory Life History or Organismal Biology		
One of the following:		3-4
GEOL102	Historical Geology	
GEOL104	Dinosaurs: A Natural History	
GEOL204	Dinosaurs, Early Humans, Ancestors, and Evolution; The Fossil Record of Vanished Worlds of the Prehistoric Past	
BSCI207	Principles of Biology III - Organismal Biology	
BSCI222	Principles of Genetics	
Upper-Level Paleobiology		
One of the following:		4
BSCI333/ GEOL331	Principles of Paleontology	
BSCI392 & BSCI393	Biology of Extinct Animals and Biology of Extinct Animals Laboratory	
Electives		
Two courses (one from Biology and one from Geology) selected from the following:		6-8
BSCI333/ GEOL331	Principles of Paleontology (if not taken to satisfy the requirement above)	
BSCI334	Mammalogy	
BSCI361	Principles of Ecology	
BSCI363	The Biology of Conservation and Extinction	
BSCI392 & BSCI393	Biology of Extinct Animals and Biology of Extinct Animals Laboratory (if not taken to satisfy the requirement above)	
BSCI370	Principles of Evolution	
BSCI399	Biology Department Research [1]	
GEOL342	Sedimentation and Stratigraphy	
GEOL431	Vertebrate Paleobiology	
GEOL436	Principles of Biogeochemistry	
GEOL437	Global Climate Change: Past and Present	
GEOL499	Special Problems in Geology	
Or another appropriate biology or geology course approved in advance by the Entomology or Geology advisor		
Total Credits		**21-24**

[1] The Paleobiology Minor requires 3 cumulative credits of BSCI399 to count as elective. Research topic must be approved by GEOL or ENTM advisor.

Prerequisites

Required Courses

The following required courses have prerequisites (as indicated in the course description):

- BSCI207 Principles of Biology III - Organismal Biology
- BSCI222 Principles of Genetics
- GEOL102 Historical Geology
- BSCI333 Principles of Paleontology or GEOL331 (cross-listed)
- BSCI392 Biology of Extinct Animals and BSCI393 (lab)

Of these, only BSCI207 and BSCI222 have supporting prerequisites not already required for the minor.

Optional Courses

The following optional courses have prerequisites (as indicated in the course description):

- BSCI333 Principles of Paleontology or GEOL331 (cross-listed)
- BSCI334 Mammalogy
- BSCI361 Principles of Ecology
- BSCI363 The Biology of Conservation and Extinction
- BSCI392 Biology of Extinct Animals and BSCI393 (lab)
- BSCI370 Principles of Evolution
- GEOL342 Sedimentation and Stratigraphy
- GEOL431 Vertebrate Paleobiology
- GEOL436 Principles of Biogeochemistry
- GEOL437 Global Climate Change: Past and Present

Of these, only BSCI334, BSCI361, GEOL342, GEOL436, and GEOL437 have supporting prerequisites not already required for the minor.

ADVISING

Advising is not mandatory for the Paleobiology Minor, however interested students are urged to consult with the Geology or Entomology Director of Undergraduate Studies prior to declaring the minor to discuss academic planning and logistics. Contact information is available at the Geology web page http://www.geol.umd.edu and the Entomology web page http://entomology.umd.edu.