Description

The Minor in Paleontology provides undergraduate students with a foundational knowledge of the fossil record and modern techniques used to study the evolutionary patterns recorded within the fossil record. The Paleontology Minor is available to undergraduate students in all majors at NC State University but may be especially appropriate for students majoring in the life sciences, agricultural sciences, physical sciences, natural resources, or science education. Students should be aware that many of the courses in the Paleontology Minor have pre-requisites and others are taught in alternate years, so plan accordingly.

Requirements (18 credit hours total)

- A grade of C- or better is required for all minor courses with a 2.0 GPA required in the minor for graduation.
- No course used in the minor can be taken for credit only (S/U).
- Courses taken for the minor can also be used toward major requirements, GEP Electives, or Free Electives.
- At least 9 credit hours of the minor must be completed at NC State.

Required Courses (9 Credit Hours)

- BIO 270 Introduction to Evolution (3 cr)
- BIO 323 Paleoecology (3 cr)
- MEA 369 Principles of Paleontology (3 cr)

Elective Courses (9 Credit Hours)

Elective List A: Students must choose at least two of the following courses:

- BIO 230 The Science of Studying Dinosaurs (3 cr)
- BIO 325 Paleontological Field Methods (4 cr)
- MEA 202 Geology II: Historical (3 cr)
- MEA 450 Introductory Sedimentology and Stratigraphy (4 cr)
- PB 445/545 Paleobotany (4 cr)
- ANT 475 Environmental Archaeology (3 cr)
- Paleontology Research or Teaching Experience (maximum 3 cr)

The focus of the research or teaching experience must be in paleontology and the experience must be approved by the Minor Coordinator (usually through a signed contract) prior to beginning the work.
These credits can be earned through BSC 478 Research Fundamentals in Biological Sciences: Vertebrate Paleontology and Taphonomy or through other departmental experiential learning offerings.

**Elective List B: Students can choose one or more of the following courses**

- BIO 330 Evolutionary Biology (3 cr)
- BIO 370 Developmental Anatomy of the Vertebrates (3 cr)
- BIO 440 The Human Animal: An Evolutionary Perspective (3 cr)
- ZO 250 Animal Anatomy and Physiology (4 cr)
- ZO 317 Primate Ecology and Evolution (3 cr)
- ZO 350 Animal Phylogeny and Diversity (4 cr)
- ZO 402 Invertebrate Biology (4 cr)
- FW 444/544 Mammalogy (3 cr)
- MEA 211 Geology II: Historical Lab (1 cr)
- HI 344 Dinomania! A cultural and scientific history of dinosaurs (3 cr)
- HI 323 Science, American Style (3 cr)
- HI 482 Darwinism in Science and Society (3 cr)
- ANT 421 Human Osteology (3 cr)
- ANT 428 Human Paleopathology (3 cr)
- ST 305 Statistical Methods (4 cr)
- ST 307 Introduction to Statistical Programming- SAS (1 cr)
- ST 308 Introduction to Statistical Programming - R (1 cr)
- ST 312 Introduction to Statistics II (3 cr)

Other relevant courses, including some capstone and special topics course offerings, can be approved by the Minor Coordinator on a case-by-case basis.

**Admissions**

Students who plan to minor in Paleontology should contact the Minor Coordinator listed below for information on how to enroll. Students must have credit for BIO 181 or BIO 230 or BIO 270 before enrolling in the Paleontology minor. Students are strongly encouraged to declare the minor early in their studies so they receive information on relevant courses, events, and other opportunities from the Department of Biological Sciences.

**Certification**

All requirements for the minor must be completed no later than the semester in which the student expects to graduate from his or her major degree program. Students apply to graduate in the minor through
MyPack at the same time that they apply to graduate in their major program.

**Contact Person**

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