GEO - Geology

GEO 111HN. Dinosaurs. 3 Credits. (3 Lec)
This course provides an introduction to dinosaur paleontology. Students will learn how hypotheses about extinct animals are formulated and tested, with comparisons to modern sedimentary environments and living animals. Recitation sections allow discussion of current research and hands-on experience with sedimentary rocks and fossils. Field trips provide additional education opportunities.

PREREQUISITE: GEO 521 and consent of instructor. This course builds on participation in on-going paleontology research. Students acquire greater experience and field techniques acquired from GEO 521 through hands-on experience during field trips to local locations and field sites.

GEO 522. Dino Paleontology II. 2 Credits.
This course provides field experience in vertebrate paleontology, including sedimentology, facies analysis, measuring stratigraphic sections, microsite screening, field identification of vertebrate and invertebrate fossils, excavation of fossil specimens, and taphonomic data collecting.

PREREQUISITE: GEO 302 Mineralogy & Optical Mineral. This two-week class provides field experience in vertebrate paleontology, including sedimentology, facies analysis, measuring stratigraphic sections, microsite screening, field identification of vertebrate and invertebrate fossils, excavation of fossil specimens, and taphonomic data collecting.

GEO 585. Mineralogy for Science Teachers. 1 Credit. (1 Sem) Su
PREREQUISITE: A minimum of 2 years teaching experience This course covers fundamental chemical concepts used in mineralogy, including (but not limited to): a) Crystallography and crystal chemistry b) Physical properties of minerals as related to their crystal structures and chemistry c) Anion classification and naming of minerals d) Gemstones versus everyday minerals (i.e., what makes a gemstone special?) e) Identification of minerals in hand specimen (lab work) f) Identification of minerals in rocks (lab work) g) Brief introduction to thin-section analysis and various analytical techniques of mineral analysis.

GEO 591. Special Topics. 1-4 Credits. (1-4 Sem; 12 cr max) On Demand
PREREQUISITE: Upper division courses and others as determined for each offering. Courses not required in any curriculum for which there is a particular one time need, or given on a trial basis to determine acceptability and demand before requesting a regular course number. Co-convened with GEO 491.

GEO 521. Dinosaur Paleontology. 2 Credits. (1 Lec. 1 Lab) Su
PREREQUISITE: Graduate Standing. This course is an introduction to Dinosaur Paleontology and Hell Creek Formation of Eastern Montana. It will provide information and hands-on experience in field techniques used in vertebrate paleontology, including interpretation of sedimentary environments and taphonomy.

GEO 522. Dino Paleontology II. 2 Credits. Su alternate years, to be offered even years.
PREREQUISITE: GEO 521 and consent of instructor. This course builds on experience and field techniques acquired from GEO 521 through hands-on participation in on-going paleontology research. Students acquire greater understanding of field data collection and formulation and testing of hypotheses; and advanced knowledge of paleoenvironments and geological processes.
Font Notice

This document should contain certain fonts with restrictive licenses. For this draft, substitutions were made using less legally restrictive fonts. Specifically:

Times was used instead of Adobe Garamond Pro.

The editor may contact Leepfrog for a draft with the correct fonts in place.