

GEO 521 Dinosaur Paleontology I

Credit: 2

Mode of Delivery: Campus

Semester Offered: Summer

Instructors:

Dan Lawver, Doctoral Candidate, Department of Earth Sciences, MSU-Bozeman

This course is designed as an introduction to the geology and dinosaur paleontology of the Hell Creek Formation of eastern Montana. The Hell Creek Formation has long been known for its diverse dinosaur taxa, including *Tyrannosaurus rex* and *Triceratops*, as well as exposures of the iridium layer associated with dinosaur extinction 65 million years ago. The combination of slide presentations, labs, and daily hiking in Makoshika State Park will provide both background information and “hands-on” learning experience. Techniques covered during the class include interpretation of sedimentary environments, taphonomy, and fossil collection and preparation. This course will integrate many aspects of biology, physical geology, paleogeography, and tectonics.

Two transportation options are available: 1) Vans will leave from the Strand Union Building (south entrance) on the MSU campus at 8 a.m. Monday morning and drive to Makoshika State Park near Glendive, MT. Approximately driving time is seven hours. 2) Participants may drive their own vehicles and meet Monday at 2pm at the Lion’s Club facility, Sleepy Hollow Lodge within Makoshika State Park. Lunch will be provided on travel days for those who decide to travel via class vans.

The facilities include individual cabins that are rustic but completely furnished and accommodate 4 to 6 students, a lodge where meals will be provided, and a separate shower house with toilet facilities. Students should furnish their own bedding and personal items such as towels, shower shoes, etc. Special dietary requirements should be noted on the registration form. Students should have appropriate hiking boots and be prepared for rain and cool weather. Additional required items include backpack, field notebook and pencils, and water containers (3-4 liters total capacity).

Course materials: PDF files of all course materials will be provided on the D2L site. Students are expected to print off copies of these files for use during the course.

Physical fitness requirements: The course requires moderate to strenuous outdoor physical activity. Students are expected to walk several miles, often in relatively steep terrain without established hiking trails. Temperatures are often in the 90°F range. Please contact the instructor before signing up for this class if you have concerns about the required physical fitness level and your ability to meet these requirements.

Student evaluations: Students will be evaluated based on daily participation in the field and during daily assigned paper discussions. A short final exam will cover topics discussed during the course.