Grande Prairie Regional College
Department of Science

PALE 400
Paleontology Field School

Course Outline

Spring/Summer 2012

Instructor: Dr. Philip Currie, Canada Research Chair in Dinosaur Palaeobiology, University of Alberta

Description: Students will learn the techniques of collection, curation and analysis of fossils primarily at the Pipestone Creek *Pachyrhinosaurus* Bonebed site, located near Grande Prairie in northwestern Alberta, Canada. The field component of the course will take place during the summer, off campus, at the field location. Each student will complete assignments in the field and will prepare a written report based on data acquired and methods learned during the field component. The report is due at the end of the term. This course may require the payment of additional fees.

Prerequisites: This course is designed for senior level undergraduate students or graduate students in paleontology and requires consent of the Department.

Course Objectives

1. Provide Students with an understanding of the basic field techniques used to find and collect fossil specimens, including the methods used to excavate, protect, and safely remove fossils from a field locality.
2. Demonstrate proper methods of field mapping of specimens so that the fossils can be properly curated and used for scientific research.
3. To provide techniques that can be used in the analysis of fossil sites.

Course Content:

This course is intended for advanced undergraduate and graduate students. The primary objective for the course is to train students in collecting and analysis methods in paleontology. The course will be given at the *Pachyrhinosaurus* Bonebed located at Pipestone Creek, near Grande Prairie in northwest Alberta. During that time, students will have practical training with fossil identification, collection, cataloguing, mapping, and site documentation. An emphasis will be placed on dinosaurs and other terrestrial vertebrate fossils, associated plant and invertebrate fossils, taphonomic analysis, fossil distribution and paleoecological analysis. Specific field projects will be assigned and graded during the course of fieldwork. Furthermore, each student will generate an independent study project based on data collected and methods learned during fieldwork. The written project is due at the end of the term.

Marks Distribution

Fieldwork and Assignments:	70%
Written Report:	30%

Logistics:
The field school will be conducted near Grande Prairie, Alberta, at the Pipestone Creek *Pachyrhinosaurus* Bonebed. In the event of rain, preparation and cataloging will take place on campus. Participants will be responsible for their own meals; lodging may be obtained in the Grande Prairie Regional College residences. Lectures and preparation of specimens will be done in the field and on campus.

Everyone is encouraged to have their own field tools (geological hammer, awls, brushes, hats, boots, safety glasses, etc..) although some tools and all fossil preservative glues will be supplied.

Lectures:
Lectures will be directly relevant to fieldwork and/or paleontology, and each will last approximately one hour. In addition, each student will be encouraged to give one talk during the field course. During the course of the field program, there may be visits to other museums or fossil localities.

Fossil Curation:
Students will be required to catalogue all fossils that they were responsible for collecting, and will be trained to do this correctly.