

**INTRODUCTION TO GEOLOGIC FIELD METHODS
51-140, 1 CREDIT, SPRING 2008
LECTURE AND LAB SYLLABUS**

Instructor: Tim Paulsen

Office: Harrington-306, Office hours 12:40-1:40 WF. You are also welcome to visit me any other time you can catch me. I'm usually available outside of my class times.

Email: paulsen@uwosh.edu

Class Time: 3:00 to 6:20 p.m. every other Monday, in H-313. Attendance is mandatory.

Text: Compton, 1985, *Geology in the Field*.
This is also the required text for Field Camp.

Field Book: *Rite in the Rain* No. 540f or equivalent (two required). These are available at the bookstore.

Equipment: Hand lens, rock hammer, scale, triangles, protractor, pencils, color pencils.

Lab Projects: There will be laboratory projects assigned at each of the first six lab meetings. These will be due at the beginning of the next class period (two weeks later). I will grade these and hand them back to you at the beginning of the following class period. All lab projects must be documented in your field book according to the procedures outlined during the first class period. Lab projects handed in late will be accepted only with a reasonable, documented excuse.

Field Trips: There will be 2 required field trips on April 21st and May 5th. We will discuss this in more detail as the dates for the trips approach.

Grades: Seven biweekly lab projects will be weighted equally for your final grade.

Class Schedule:

February 4

Lecture: Philosophy and procedures; Geological field books and notes.

Reading: Compton, Chapter 1.

Lab: review of topographic and geologic maps.

Due February 18.

February 18

Lecture: Geologic field equipment and instruments.

Reading: Compton, Chapter 2, sections 2-1 to 2-3; Chapter 4.

Lab: Identification and description of rocks in hand specimens and outcrops.

Due March 3.

March 3

Lecture: Introduction to the Brunton Compass.

Reading: Compton, Chapter 2, Sections 2-4 to 2-8.

Lab: Declination, bearings and azimuths, hand level, clinometer, strike and dip.

Due March 17.

March 17

Lecture: Pace and compass surveying.

Reading: Compton, Chapter 5.

Lab: Pace and compass map.

Due April 7.

Spring Break – March 22-30**April 7**

Lecture: GPS mapping.

Reading: Compton, Chapter 3.

Lab: GPS mapping project.

Due April 21.

April 21

Lecture: Procedure at outcrops

Reading: Compton, chapter 3.

Lab: Outcrop description and sketches.

Due May 5.

May 5

Focus: Jacob staff and measuring stratigraphic sections

Reading: Compton, chapter 3, 11.

Field trip to Oakfield-measuring a stratigraphic section.

Due May 12.