

University of Montana  
**ScholarWorks at University of Montana**

---

Syllabi

Course Syllabi

---

1-2013

# GEO 231.01: Geosciences Field Methods

James W. Sears

University of Montana - Missoula, [james.sears@umontana.edu](mailto:james.sears@umontana.edu)

Let us know how access to this document benefits you.

Follow this and additional works at: <https://scholarworks.umt.edu/syllabi>

---

## Recommended Citation

Sears, James W., "GEO 231.01: Geosciences Field Methods" (2013). *Syllabi*. 803.  
<https://scholarworks.umt.edu/syllabi/803>

This Syllabus is brought to you for free and open access by the Course Syllabi at ScholarWorks at University of Montana. It has been accepted for inclusion in Syllabi by an authorized administrator of ScholarWorks at University of Montana. For more information, please contact [scholarworks@mso.umt.edu](mailto:scholarworks@mso.umt.edu).

University of Montana  
GEO 231 (GEOS 230): Geological Field Methods  
Spring 2013  
Jim Sears CHCB 362 (james.sears@umontana.edu)  
Dylan Schmeelk, TA CHCB 320 (dylan.schmeelk@umontana.edu)

This course introduces students to a variety of field methodologies routinely used in the collection, processing, and interpretation of geoscientific field data.

Each week we will conduct a field exercise involving standard geoscientific field techniques. You will need a good weather-proof field notebook and a hand lens.

Evaluation: All exercises, including field final, have equal weight.

**Approximate schedule (depending on weather):**

- 1-29: Introduction/ Geologic setting of western Montana
- 2-5: Topographic map reading, locating (Campus)
- 2-12: Geologic map reading (Campus)
- 2-19: Measuring structures (Kim Williams Trail)
- 2-26: Measuring and describing strata (Kim Williams Trail)
- 3-5: Making a geologic map (North Hills)
- 3-12: Making a geologic map (North Hills - continued)
- 3-19: Mapping fluvial terraces (Missoula)
- 3-26: Mapping glacial lake features (Missoula)
- 4-2: SPRING BREAK
- 4-9: Ground water (Campus)
- 4-16: Field trip to Bearmouth: Mapping igneous rocks
- 4-23: Field trip to Rattler Gulch: Stratigraphy, collecting fossils
- 4-30: Field trip to Rattler Gulch: Structural geology, cross-section
- 5-7: Field final