

# GLG 451 FIELD GEOLOGY I

## Spring 2016 Announcement (SLN 12807)

### Instructor

Ramón Arrowsmith, ISTB4 773  
ramon.arrowsmith@asu.edu  
phone (480) 965-3541

### Required text

Compton, R. R. (1985). *Geology in the Field*. New York: John Wiley & Sons. 397 p., ISBN 0-471-82902-1.

For reference it is also good to have on hand  
Davis, G. H., Reynolds, S. J., & Kluth, C. F. (2011).  
*Structural Geology of Rocks and Regions*. New  
York: John Wiley & Sons. 839 p., ISBN 978-0-471-15231-6.

There will also be a **BLACKBOARD** site for this course.

### PREREQUISITE

GLG 310 Structural Geology. Also note that GLG 321 Mineralogy is a co-requisite.

### SCHEDULE

Fridays 1-3:00 pm (location PSH-450), and three weekends plus most of Spring Break in the field.

***All field trips are mandatory and cannot be made up. These are the only weekend meetings.***

Field trip dates for 2016 (please make note of them ***now***):

**23 - 24 January** (returning to ASU Saturday night)

**20 - 21 February** (Saturday overnight camp in a remote desert area)

**27-28 February** (returning to ASU Saturday night)

**5 – 10 March:** Spring Break Minicamp (leave Saturday morning at 7:30 am, nights in a local motel, release Thursday midday; return to ASU not possible during this time)

After Minicamp, we will meet far less often.

### THINGS YOU SHOULD BE AWARE OF

- The course emphasizes accurate field observation and recording of geologic data, 3D interpretation of units and structures, and reconstruction of geologic histories.
- You must be able to *identify and interpret the mineralogy and texture of all rock units* you encounter in the field. Everything you need to know about this, you should have already learned in Physical, Historical, and Structural Geology. Just in case, we will review the basics (and review again as necessary).
- You will be required to make accurate and neat *geologic maps* of all of your field areas and to construct accurate, reasonable *cross-sections* from them. We'll review cross sections as well.
- As this course satisfies a General Studies requirement in Literacy and Critical Inquiry (L), expect to do a fair amount of *technical writing* and to have all of your work *rigorously edited* for content and style. We will provide you with plenty of guidelines, examples, and constructive feedback.
- We'll be working in a number of (mostly) scenic, (sometimes) spectacular, and (always) geologically interesting localities, and though you'll work very hard, we think you will also enjoy yourselves tremendously. I can't wait to teach this course again!

