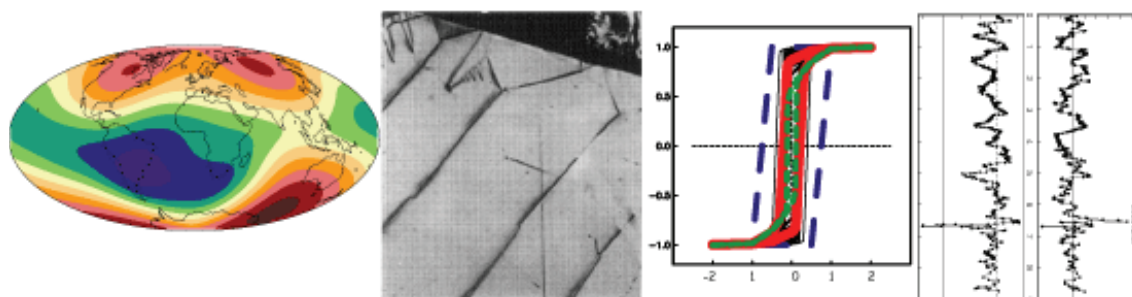


## Rock and paleomagnetism



### Instructors:

Lisa Tauxe, 300E Ritter Hall, 858-534-6084; [ltauxe@ucsd.edu](mailto:ltauxe@ucsd.edu), <http://scrippsolars.ucsd.edu/ltauxe>

Jeff Gee, 300D Ritter Hall, 858-534-4707; [jsgee@ucsd.edu](mailto:jsgee@ucsd.edu), <http://scrippsolars.ucsd.edu/jsgee>

### How to take this class:

Attend each lecture listed below either live in class or online, or listen to the recording online (if available). Lectures will be W/F at 2:00-3:20 pm PDT in the Sea Cave of the Eckart Building.

Do the required reading in the textbook, *Essentials of Paleomagnetism*. Don't just skim the reading for clues to answer the homework - read the entire assigned part with concentration.

Work the assigned problems and e-mail a zip file with the jupyter notebook and all necessary datafiles in it to [ltauxe@ucsd.edu](mailto:ltauxe@ucsd.edu). Problems are due the one week after they are assigned - but don't procrastinate! The purpose of these assignments is to allow you to work through the lecture and reading material in an active way. You may consult with your fellow students, but the work you turn in must be your own. Do not just copy or modify answers from others, including handouts from previous classes - that is not what this class is about and will be considered cheating. Students suspected of cheating will be reported to the Academic Integrity Office.

In addition to the homework assignments (50%), there will be a field and lab project (20%) and final project or your choice (30%). The mandatory but totally fun field trip will take place on May 5.

The most up-to-date information for this class will be on [tritoned](http://tritoned.com).

Schedule - dates subject to change

Date	Topic	instructor	Reading	Assignment
4/3/18	Overview	Lisa		
4/5/18	Physics of Magnetism	Lisa	Chapter 1	Assignment 1
4/10/18	The Geomagnetic field	Lisa	Chapter 2	
4/12/18	Magnetism at the atomic level	Lisa	Chapter 3	Assignment 2
4/17/18	Energy, domains & hysteresis	Jeff	Chapter 4&5	
4/19/18	Magnetic mineralogy	Jeff	Chapter 6	Assignment 3
4/24/18	Natural remembrance	Jeff	Chapter 7	
4/26/18	Applied rock mag	Jeff	Chapter 8	Assignment 4
5/1/18	Getting a vector	Jeff	Chapter 9	
5/3/18	Statistics on a sphere	Lisa	Chapter 11	Assignment 5
5/5/18	Field trip	Jeff & Lisa		
5/8/18	Cut samples in lab	Jeff		
5/10/18	Lab measurements	Jeff		Assignment 6
5/15/18	Bootstrapping	Lisa	Chapter 12	
5/17/18	Anisotropy	Jeff	Chapter 13	Assignment 7
5/22/18	Paleointensity	Lisa	Chapter 10	
5/24/18	Paleosecular Variation	Lisa	Chapter 14	Assignment 8
5/29/18	Reversals and Excursions	Lisa	Chapter 14	
5/31/18	Time scales and polarity stratigraphy	Lisa	Chapter 15	Assignment 9
6/5/18	Polar Wander & plate tectonics	Jeff	Chapter 16	
6/7/18	Gplates	Jeff		Assignment 10
6/12/18	Final Presentations			