

SYLLABUS
EES 341 LEHIGH FIELD CAMP
6 CREDITS
SUMMER SEMESTER 2010
15 MAY – 10 JUNE

- Director: Dr. F. J. Pazzaglia; Department of Earth and Environmental Sciences, 401 Williams, Phone: 610-758-3667; fjp3@lehigh.edu.
- Instructors: Dr. David J. Anastasio, Dr. Edward B. Evenson, Dr. Steve Peters, Dr. Joan Ramage, Dr. Claudio Berti, Dr. Bruce Idleman.
- Staff: Two TAs, quartermaster, camp commissary.
- Prerequisites: Earth Materials (Mineralogy and/or Petrology); Structural Geology, Sedimentology-Stratigraphy or equivalents; Hydrology/hydrogeology. Deficiencies handled by petition.
- Texts: Field Camp manual provided by instructors; Compton (1985 – optional).
- Scope: Synoptic, capstone field experience for geology and environmental science majors. Instruction on how to make, read, and interpret geologic maps and how to envision field problems and collect geologic and environmentally diagnostic data. Using of the field, field geologic relationships, and the concepts of geological mapping and environmental data as the vehicle towards development of a professional earth and environmental scientist.
- Format: Several multi-day, multi-partner field mapping projects, instructed by one or more faculty, and one or more staff. Projects contain an in the field group component, and a map drafting and writing individual component.
- Grading: Grades are based on the quality of project produced during three main integrated exercises, several smaller exercises, a strat measuring exercise, synthesis of map and environmental data, and exercises during the cross-country trip. The breakdown is:
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| Cross country trip, notebook, Palo Duro Canyon | 10% |
| Strat section exercise | 15% |
| San Ysidro carbon sequestration exercise | 20% |
| Jemez Mountains volcanic exercise | 15% |
| Huerfano Park structure project | 20% |
| Integrated, self learning group project | 10% |
| Camp participation, group leadership, attitude | 10% |

Field Camp 2010
Tentative itinerary and schedule – SUBJECT TO CHANGE

- May 15 5:00 AM, Depart Lehigh, hike Old Rag, camp Big Meadows, Shenandoah NP
- May 16 Shenandoah NP to Great Smoky Mts. NP, camp research headquarters
- May 17 Grandfather Mt window, to Mammoth Cave NP, Camp Maple Grove Group Site
- May 18 Tour Mammoth Cave, to SE Missouri, camp Johnson Shut-Ins State Park.
- May 19 Precambrian and lower Paleozoic rocks of the St. Francois Mts, Missouri, to Oklahoma, camp Red Rock S.P.; Ogallala Fm soils and aquifer. Dust bowl.
- May 20 To Palo Duro Canyon S.P. Texas, camp Palo Duro
- May 21 Palo Duro, soils, stratigraphy, geomorphology, basic mapping, section measuring.
- May 22 To New Mexico. Sandia Crest, Paliza Canyon Campground.
- May 23 San Ysidro breached anticline, carbon sequestration project
- May 24 Measure section, complete section measuring exercise.
- May 25-27 San Ysidro project
- May 28 Bandelier National Monument Jemez volcanic rock project, Camp Frijoles Canyon
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- May 30 Anasazi sustainability exercise, Exploration and discovery trip, TBD
- May 31 Exploration and discovery trip, TBD
- June 1 Exploration and discovery trip, TBD
- June 2 Drive to Huerfano Park, CO, meet up with UNM field camp and John Geissman
- June 3-7 Huerfano Park structure project.
- June 8 Break camp, Great Sand Dunes N.M. final party
- June 9-10 Drive Home.