GLY 6932
Instrument Methods

COURSE SYLLABUS

Spring, 2015

INSTRUCTORS:
George Kamenov
Ann Heatherington
Jason Curtis

Offices, email addresses, office hours, office phone numbers:
George Kamenov – kamenov@ufl.edu, 363 Williamson Hall, 846-3955, T 9:30-11:30am and F 9-11am;
Ann Heatherington – 371 Williamson Hall, 392-6220, Tues and W 10-12 AM and by appointment
Jason Curtis – curtisj@ufl.edu, 372 Williamson Hall, 392-2296, M 9-11am and W 9-11am, and by appointment

Class hours – to be determined by instructors and individual students
Classrooms – Geological Sciences research labs
Heatherington – 302 and 304 Williamson Hall
Kamenov – 324 and 333 Williamson Hall
Curtis – 330 and 336 Williamson Hall

Course credit – 1
Course section – 025H

It is advisable that the student already has a scientific research project that requires the use of the analytical instruments in the Department of Geological Sciences before enrolling in the class. Consult the instructor(s) if you do not have a specific project but still want to take the class. In such cases a project will be assigned to you by the instructor(s).

A. Description – This course is designed to train students in sample preparation and the use of one or more of the analytical instruments in the Department of Geological Sciences. These instruments include a scanning electron microscope (SEM), an X-Ray fluorescence spectrometer (XRF), an inductively coupled plasma-mass spectrometer (ICP-MS), a multi-collector inductively coupled plasma-mass spectrometer (MC-ICP-MS), a thermal ionization mass spectrometer (TIMS), one of several stable isotope mass spectrometers and one of two laser based stable isotope analyzers. Students will learn to operate the instruments that relate to their individual projects.
B. Course Objectives – The class will allow students to get one-on-one training on how to prepare samples and perform analysis on the state of the art analytical instruments in the Department of Geological Sciences. While learning the instrument the students will be able to analyze the samples for their specific project.

C. Course Topics – Laboratory work on student’s specific project samples.

D. Textbook – None

E. Course materials – Sample preparation protocols will be provided by the instructors.

F. Grading plan – Final grades will be assigned on the basis of the student’s work on their specific project.

H. For students with disabilities - Students requesting classroom (lab room) accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation.

I. Schedule to be determined between instructors and individual students.