GLY 4300L: Petrology Lab  
Spring Term 2019

Room: PC 341 (Charles Perry Building at UP Campus)  
Instructor: Kimberly Beck  
Email: kbeck001@fiu.edu  
Office: PC 326

Class: Tuesday 3:30PM – 6:15PM  
(Office hours are by appointment, please schedule appointment by email)

Recommended Text: Philpotts, Petrography of Igneous and Metamorphic Rocks

Purpose of lab:  
- Complement the Petrology lecture meetings with hands-on experience applying lab techniques to understand geologic concepts  
- Reinforce the ideas and tools necessary to understand rock-forming principles  
- To classify and describe igneous and metamorphic rocks based on their mineralogy and texture in thin section and in hand sample  
- To figure out how, where, when and why igneous and metamorphic rocks form based on their geochemistry, mineralogy and texture

Course Goals:  
Upon completion students should be able to:  
- Identify and describe minerals and textures of igneous and metamorphic rocks in thin section or in hand sample  
- Describe the types and relative abundances of phases in a rock based on observations from thin sections and hand samples  
- Classify/name a given rock based on mineral abundance or chemical composition  
- Interpret textures and crystallization history using phase diagrams  
- Explain how magma viscosity, silica content, and volatile content control volcanic eruption style to form different extrusive rock types  
- Understand how igneous rocks form in different geologic settings and explain their origin based on observed mineralogy, texture and geochemistry

Grading:  
The final grade will be a combination of lab participation/quizzes (10%), homework assignments (10%) the midterm exam (20%), the final exam (20%), and a detailed notebook containing information and details on the topics we discuss in class, including thin section and hand sample descriptions (40%). Late assignments will receive a penalty.

Policies:  
- Attendance is mandatory because written exercises are completed during the labs. There are no makeup labs or exams. If you have a medical emergency or a serious family problem then arrangements for an alternate assignment will be made possible. Verification in the form of an official document will be required. Labs start on time, points will be deducted for tardiness. If you are more than 10 minutes late to lab you will not be permitted to attend the lab and will need to make arrangements to complete the lab with one of the other scheduled lab courses, or that lab will be counted as a zero.
• Valid reasons for missing class: “I was hospitalized, I was at the doctor (with a
doctor’s note for either), I was on a field trip for another class (with note), Death in
the (immediate) family (with documentation), athletic event (athletes only) with
documentation.” If you are aware that you will need to miss a class within the
semester, requests should be made during the first week of the semester, so
arrangements can be made.
• Reasons for missing that will not be excused: “I had a cold, I was out of town, I was
stuck in traffic.” There will be NO makeup allowed for these types of excuses.
- Missing THREE labs will result in the automatic FAILURE of the lab
- In keeping with university policy, accommodations for students who wish to observe their
religious holidays will try to be made. Students should make these requests known during the
first week of the semester.
- Cheating and any other kind of misconduct is unacceptable and will be reported to
university officials. See Student Handbook regarding the FIU policies.
- The class will be responsible for cleaning up the Lab.
- No food or drinks in the laboratory; cell phones must be turned off during lab; points will
be deducted for phone usage.

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*The syllabus may be subject to change due to unforeseen and/or unscheduled events such as emergency
university closings. Students will be made aware of all changes in class or via provided email address.*