GEOL 366 Sedimentary Petrology and Geochemistry
Instructor: Sally Sutton

Course Description:
• Composition, identification, and classification of sedimentary rocks; geochemical processes affecting sedimentary rocks and surficial sedimentary deposits.

Learning Outcomes: Successful students will learn to
• Recognize, describe, and classify sedimentary rocks in hand sample and thin section.
• Relate the texture, mineralogy, and chemistry of sedimentary rocks to processes of sediment generation, transport, deposition, and diagenesis.
• Apply fundamentals of acid-base and oxidation-reduction reactions to interpretation of processes affecting sedimentary rock formation, alteration, and destruction.
• Graphically represent and understand mineral stabilities in aqueous systems as a function of such variables as pH, Eh, ionic concentrations or ratios, and temperature.
• Interpret secular changes in tectonics, climate, and atmospheric composition, based on the sedimentary rock record.