

**210. Geotectonics (3)**

Prerequisite: Geol 106 or permission of instructor. Theory and applications of continental drift, plate tectonics, and sea floor spreading to understanding continental geology. Special emphasis on geology of the Americas. Structural analysis of deformed plate margins. (2 lecture, 3 lab hours)

**212. Mineral and Rock Analysis (3)**

Prerequisite: Geol 100, Chem 1A-B, or permission of instructor. Principles and techniques of mineral and rock analysis using universal stage, X-ray diffractometer, X-ray fluorescence analyzer, atomic absorption and flame emission spectrometers, and other techniques. (1 lecture, 6 lab hours)

**222. Carbonate Petrology (3)**

Prerequisite: Geol 100. Chemistry and content of carbonate rocks; introduction to organic and inorganic constituents with emphasis on diagenetic alteration. May include field trips. (2 lecture, 3 lab hours)

**250T. Topics in Geology (1-3; max total 9 if no topic repeated)**

Prerequisite: Major or minor in geology; permission of instructor. Advanced studies in such areas as hydrology, regional stratigraphy, and marine geology.

**272. Metamorphic Petrology (3)**

Prerequisite: Geol 100, 101, Chem 1A-B, or permission of instructor. Identification, classification, and interpretation of metamorphic and metasomatic rocks using the petrographic microscope and other techniques. May include field trips. (2 lecture, 3 lab hours)

**290. Independent Study (1-3; max total 6)**

See *Academic Placement—Independent Study*.

**299. Thesis (2-6)**

Prerequisite: see *Master's Degrees-Thesis Requirements*. Preparation, completion, and submission of an acceptable thesis for the master's degree.