

# The New Curriculum

For the first time in many years the department has revised its curriculum for undergraduate majors. Our intent was to provide a course sequence that was uniform for all students, provided both breadth and rigor, and introduced some degree of specialization that students could build on in graduate school. All majors will still be required to have a year each of calculus, chemistry, and physics. The required geology courses:

A. All three of the following courses:

202-Introduction to Geologic Structures—4 credits—A field-based introduction to geologic structures, geomorphic expression, field mapping techniques, and instrumentation.

203-Earth Materials—5 credits—A survey of minerals and rocks, with labs taught at the hand specimen and thin section level.

204-Geologic Evolution of the Earth—4 credits—A chronological review of the major events in the history of the planet, with emphasis on plate tectonics and interactions between the biosphere and the solid and fluid earth.

B. Two of the following three courses:

302-Physics and Chemistry of the Earth's Interior—3 credits —An overview of the internal structure and processes that operate within the earth, based on petrologic, geochemical, and geophysical studies.

303-Fluids and Sedimentary Processes—3 credits—A survey, emphasizing low-temperature aqueous geochemistry, of fluid flow, and sedimentary and diagenetic processes, at and near the surface of the crust.

304-Geobiology—3 credits—The biological basis of the fossil record, major events in life history, interactions between organisms and the physical earth, and use of fossil data in reconstructing past conditions.

C. Twelve credits from the following courses:

320-Geomorphology, 3 credits

370-Petrology, 4 credits

375-Introductory Geochemistry, 3 credits

430-Principles of Stratigraphy, 3 credits

455-Structural Geology, 3 credits

540-Invertebrate Paleontology, 3 credits

594-Introduction to Applied Geophysics, 3 credits

627-Hydrogeology, 4 credits

D. Three elective credits from an advanced course in the main department subdisciplines.

Total credits: 34

Students may also use up to six additional credits taken in non-required courses (*e.g.*, Geology 101 or Field Camp) to count toward the L&S graduation of 120.



At GSA: William Peck, Jade Star Lackey, Cory Clechenko, Liz King.



Pat and Kelly Colgan, Sue Swanson, Peter Riemersma.

photos: Carl Bowser