

Information for New Geology Majors

Introduction

Geology is a challenging and rewarding major that trains students to be careful observers of nature, critical and analytical scientific thinkers, and clear scientific writers. The field of geology integrates aspects of field work, chemistry, biology, physics and math – perhaps more so than any other scientific discipline.

CSUS Geology students typically go on to become professional geologists or enter graduate school; some choose to go on to non-geology related professions. Regardless of the path they choose, geology students tend to be responsible stewards of Earth resources, and consistently report great satisfaction with their choice of major.

Advisor

Academic advisors are typically assigned by the Department Chair when a student becomes a Geology major. Students who do not know who their advisor is, or who want to change advisors, should talk to the Department Chair.

Use your advisor! Drop in at least once a semester to let him or her know how you are getting along and what your plans are for next semester. Let your advisor know who you are.

Program Information

New students should purchase a University Catalog for the year they enter CSUS. In addition, students should obtain a list of course prerequisites and Department handouts that show the suggested sequence of courses. These can all be obtained from advisors or the Department Office.

You should work out a course schedule for each semester with your advisor. This will help you prevent mistakes such as trying to take a course out of sequence or in a semester the course is not offered.

Books

Students should plan to buy all required textbooks for courses. The textbook for one course is often a valuable reference for subsequent courses.

Students are encouraged to buy Compton's *Manual of Field Geology* and read as much of it as they can understand. It will be required for Geology 111A&B, 102B, 103B, & 110B and field camp. A paperback dictionary of geologic terms is another good investment.

Workload

Being a Geology Major is a full-time job. Geology classes are demanding. Mastery of course work cannot be achieved by half-hearted efforts. Even a half-time job will tax most students. Many seniors, and some juniors, work ten hours per week in geology intern positions. Those who must work a substantial number of hours should plan on an extended stay at CSUS.

Field Work

All Geology majors take Geology 111A&B (Field Methods and Mapping). Students pursuing the B.S. degree are also required to take field courses in petrology and structural geology (G102B, G103B, and G110B), and attend a summer field camp of 4-6 weeks. In addition, students are encouraged to go on other field trips offered by the Geology Club or professional societies.

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Program Planning and Course Sequence

Take courses as close to the proper sequence as possible. Success in upper division courses depends on good understanding of material from lower division courses.

You should take Physical and Historical Geology, Chemistry, Physics, and Calculus as early as possible. Avoid putting off "dreaded" courses.

Departmental Objectives

The Geology program has three main objectives:

1. To teach students to think scientifically;
2. To give students the information, background and experience to progress in geology after they leave CSUS; and
3. To teach students certain necessary skills such as how to use a petrographic microscope, how to make a geologic map, how to do library research, and how to write a technical report.

Geology Club

Students should watch the Geology Club bulletin board for announcements of club activities such as trips, speakers and parties. The Geology Club is run entirely by students, and provides an opportunity to meet Geology majors and learn first-hand about the Department. Students should subscribe to the Geology Club listserv because many announcements and employment opportunities are posted via e-mail.

Writing Skills

The Geology Department requires that written reports be well organized with content presented clearly and concisely. When writing for Geology courses students are expected to

use proper English, grammar, spelling, and punctuation. All students should take required writing courses as early as possible.

An excellent general writing reference is Strunk and White, 1979, *Elements of Style*, available in paperback in the CSUS Bookstore.

All CSUS students are required to pass the Writing Proficiency Exam. Take this exam as early as possible.

The B.S. Degree Program

The B.S. Degree Program is designed to be the best possible preparation for advanced work in geology, be it in graduate school or as a professional geologist. The B.S. degree program offers a strong background in the major areas of geology including mineralogy, petrology, paleontology, structural geology, hydrogeology, surficial processes geophysics, field mapping, and report writing.

The B.A. Degree Program

The B.A. degree program is designed as a shorter, less rigorous preparation for some geology jobs, earth science teaching in high school, and jobs such as park naturalist, environmentalist, geologic planning specialist, or in geology-related businesses. The B.A. degree can be used in dual-track majors combining geology with biological sciences, chemistry, physics, or engineering.

As with any undertaking, what you get out of your educational experience grows in proportion to what you put into it. Individual initiative is necessary to be successful in the Geology major and in the practice of Geology.