

GEOG 138 GIS Internship (2)

6 hours laboratory

Prerequisite: GEOG 120

Transfer acceptability: CSU

The Geographic Information Systems (GIS) internship is a directed program allowing students to apply classroom instruction to real-world GIS problem solving by working with a government or private agency. Students will be under the supervision of an instructor from the college and an advisor from the agency while working in one or more aspects of GIS operations.

GEOG 195 Regional Field Studies in Geography (1,2,3)

2, 4, or 6 hours lecture/laboratory

Transfer acceptability: CSU; UC – Credit determined by UC upon review of course syllabus.

Extended field studies of the geography of selected regions. Emphasis upon field observation and interpretation of climate, meteorology, vegetation, soils, and landforms.

GEOG 295 Directed Study in Geography (1,2,3)

3, 6, or 9 hours laboratory

Prerequisite: Approval of project or research by instructor

Note: May be taken 4 times for a maximum of six units

Transfer acceptability: CSU; UC – Credit determined by UC upon review of course syllabus.

Independent study for students who have demonstrated skills and/or proficiencies in geography subjects and have the initiative to work independently on projects or research outside the context of regularly scheduled classes. Students will work under the personal supervision of an instructor.

Set 3

CHEM 110	General Chemistry	3
CHEM 110L	General Chemistry Laboratory	2
CHEM 115	General Chemistry	3
CHEM 115L	General Chemistry Laboratory	2

Group Three (Select at least 8 units)

Any other courses in Group Two not taken above		8-10
GEOG 110	General Geology: National Parks	3
GEOG/		
GEOG 125	California Geology and Geography	3
GEOG 195	Regional Field Studies in Geography	1,2,3
GEOG 197	Geology Topics	1,2,3
GEOG 295	Directed Study in Geography	1,2,3
ASTR 100	Principles of Astronomy	3
BIOL 100	General Biology	4
MATH 205	Calculus/Analytic Geometry, Third Course	4
MATH 206	Calculus/Differential Equations	4
OCN 100	Oceanography	3
OCN 100L	Oceanography Laboratory	1
OCN 115	Coastal Oceanography	3
PHYS 232	Principles of Physics	4

TOTAL UNITS 35 - 38

COURSE OFFERINGS

GEOG 100 Basic Geology (3)

3 hours lecture

Note: Together with GEOG 150, a prerequisite to upper division courses in Geology

Transfer acceptability: CSU; UC; CAN GEOG 6

Principles of physical geology. Plate tectonics, rocks and minerals, weathering, mass-wasting, surface and ground water, wind, waves and currents, glaciation, mountain building, volcanoes and other igneous activity, deformation and resulting structures, earthquakes, Earth's interior, geologic time, and earth resources.

GEOG 100L Basic Geology Laboratory (1)

3 hours laboratory

Prerequisite: Completion of, or concurrent enrollment in, GEOG 100

Note: May be offered as a field laboratory; satisfies lab requirement in Physical Science

Transfer acceptability: CSU; UC

Laboratory and field identification of rocks and rock forming minerals. Study of geologic processes by means of geologic and topographic maps.

GEOG 110 General Geology: National Parks and Monuments (3)

3 hours lecture

Transfer acceptability: CSU

Geologic history and processes of formation of our natural landscape. Principles of physical and historical geology as revealed in the structure, stratigraphy, and rock types of the parks and monuments.

GEOG 120 Planets, Moons, and Comets (3)

3 hours lecture

Note: Cross listed as ASTR 120

Transfer acceptability: CSU; UC – ASTR/GEOG 120 and ASTR 205 combined: maximum credit, one course

The astronomy and geology of the solar system, observations, dynamics, relativistic ideas, including theories of formation and evolution. Comparative survey of the atmospheres, surface features, and interiors of planets and satellites. Minor objects, such as comets and asteroids, will be included.

GEOG 125 California Geology and Geography (3)

3 hours lecture

Note: Cross listed as GEOG 125

Transfer acceptability: CSU; UC

Emphasizes the physical geographic and geologic factors that have combined to form the varied landscapes of California. Climate and vegetation patterns, as well as the various geomorphic processes will be studied.

Geology (GEOL)

Contact the Earth, Space, and Aviation Sciences Department for further information.

(760) 744-1150, ext. 2512

Office: NS-110G

Associate in Arts Degrees -

AA Degree requirements are listed in Section 6 (green pages).

- Geology

PROGRAM OF STUDY

Geology

Provides the student with sufficient background to begin upper division coursework and will prepare the student for entry-level jobs that require geologic knowledge. The student is advised to check with the school to which he/she may wish to transfer for additional courses which may be required.

A.A. DEGREE MAJOR

Program Requirements		Units
Group One		
GEOG 100	Basic Geology	3
GEOG 100L	Basic Geology Laboratory	1
GEOG 150	Dinosaurs and Earth History	3
GEOG 150L	Dinosaurs and Earth History Laboratory	1
GEOG 195	Regional Field Studies in Geography	2
Group Two (Select at least two sets of courses listed below)		
Set 1		
MATH 140 and	Calculus/Analytic Geometry, First Course	5
MATH 141	Calculus/Analytic Geometry, Second Course	4
Set 2		
PHYS 120 and		
PHYS 121	General Physics	8
or		
PHYS 230 and		
PHYS 231	Principles of Physics	10

GEOL 150 Dinosaurs and Earth History (3)

3 hours lecture

Prerequisite: GEOL 100, 110 or 125**Transfer acceptability:** CSU; UC

Principles of historical geology. The origin and evolution of Earth and its biosphere, incorporating plate tectonics, stratigraphy, paleontology, and geologic dating. Together with GEOL 100, a prerequisite to upper division courses in geology.

GEOL 150L Dinosaurs and Earth History Laboratory (1)

3 hours laboratory

Prerequisite: Completion of, or concurrent enrollment in, GEOL 150**Transfer acceptability:** CSU; UC

Laboratory and field identification of rocks and fossils. Elements of stratigraphic methods and of vertebrate and invertebrate paleontology. Study of geologic and topographic maps in relation to earth history.

GEOL 195 Regional Field Studies in Geology (1,2,3)

2, 4, or 6 hours lecture/laboratory

Prerequisite: GEOL 100, 110 or 125 or GEOG 100**Note:** May be taken 4 times with different content for a maximum of 6 units**Transfer acceptability:** CSU; UC – Credit determined by UC upon review of course syllabus.

Extended field studies of the geology of western North America over weekends and during vacation and summer sessions. Emphasis upon field observation and interpretation of rock types, landforms, and structure. Localities visited may vary from year to year.

GEOL 197 Geology Topics (1-3)

Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.

Note: May be taken 3 times for a maximum of 6 units**Transfer acceptability:** CSU

Topics in Geology. See Class Schedule for specific topic offered. Course title will designate subject covered

GEOL 295 Directed Study in Geology (1,2,3)

Arrange 3, 6, or 9 hours laboratory with department chairperson

Prerequisite: GEOL 150**Note:** May be taken 4 times for a maximum of 6 units**Transfer acceptability:** CSU – UC Credit determined by UC upon review of course syllabus.

Individual study in field, library, or laboratory for interested students.

German (GERM)

Contact the Foreign Languages Department for further information.

(760) 744-1150. ext. 2390

Office: F-5

COURSE OFFERINGS

For students who have completed foreign language course work at the high school level, and need clarification regarding placement in college level course work, contact the Counseling Center. Universities have varying policies regarding the granting of transfer credit when there is a combination of high school and college level course work.

GERM 101 German I (5)

5 hours lecture-1 hour laboratory

Transfer acceptability: CSU; UC; CAN GERM 2; GERM 101+102 =CAN GERM SEQ A

This course is the first semester of German. This elementary level course is a study of the German language and German-speaking cultures, with emphasis on the development of communicative skills and basic structures. Course combines in-class instruction and practice with self-paced study in the Foreign Language Laboratory. This beginning-level course is for students with no previous course-work in German.

GERM 101A German IA (3)

3 hours lecture

Note: Covers the first half of GERM 101; not open to students with credit for GERM 101**Transfer acceptability:** CSU; UC

German 101A is equivalent to the first half of German 101. This elementary level course is a study of the German language and German-speaking cultures, with emphasis on the development of communicative skills and basic structures. This beginning-level course is for students with no previous coursework in German.

GERM 101B German IB (3)

3 hours lecture

Prerequisite: GERM 101A or one year of high school German**Note:** Covers the second half of GERM 101; not open to students with credit for GERM 101**Transfer acceptability:** CSU; UC

German 101B is equivalent to the second half of German 101, and is a continuation of German 101A. This elementary level course is a study of the German language and German-speaking cultures, with emphasis on the development of communicative skills and basic structures.

GERM 102 German II (5)

5 hours lecture-1 hour laboratory

Prerequisite: GERM 101 or 101B or two years of high school German**Transfer acceptability:** CSU; UC; CAN GERM 4; GERM 101 + 102 =CAN GERM SEQ A

This course is the second semester of German. This elementary level course is a study of the German language and German-speaking cultures, with continued emphasis on the development of communicative skills and basic structures. Course combines in-class instruction with self-paced study in the Foreign Language Laboratory.

GERM 102A German IIA (3)

3 hours lecture

Prerequisite: GERM 101 or 101B or two years of high school German**Note:** Covers the first half of GERM 102; not open to students with credit for GERM 102**Transfer acceptability:** CSU; UC

German 102A is equivalent to the first half of German 102. This elementary level course is a study of the German language and German-speaking cultures, with continued emphasis on the development of communicative skills and basic structures.

GERM 102B German IIB (3)

3 hours lecture

Prerequisite: GERM 102A or two years of high school German**Note:** Covers the second half of GERM 102; not open to students with credit for GERM 102**Transfer acceptability:** CSU; UC

German 102B is equivalent to the second half of German 102, and is a continuation of German 102A. This elementary level course is a study of the German language and German-speaking cultures, with continued emphasis on the development of communicative skills and basic structures.

GERM 201 German III (5)

5 hours lecture

Prerequisite: GERM 102 or three years of high school German**Transfer acceptability:** CSU; UC; CAN GERM 8; GERM 201 + 202 = CAN GERM SEQ B

This course is the third semester of German. This intermediate level course is a study of the German language and German-speaking cultures, focusing on intermediate level structures and readings of culturally relevant authentic materials. Emphasis is on developing oral, listening, reading and writing skills in order to acquire proficiency in German. Class is largely conducted in German.