

08-7nn

Current Course prefix, number and title

Program Title

08-7nn American Southwest Seminar

Current Course prefix, number and title

Program Proposals

New Degree Program

Program Title Change

Other

New Minor Program

New Track

Current program name

Proposed

Approvals

Date

Signature

Signature

Date

Date

Signature

Part II. Description of Curricular Change

1. SYLLABUS OF RECORD

Prerequisite: Grade of C or better in GEOS 201 and GEOS 202; instructor permission required
A seminar introduction to the geology of the American Southwest. Includes examination of Colorado Plateau tectonics, Basin & Range tectonics and volcanic vents in the western Sierra Nevada.

VII. Required textbooks, supplemental books and readings

The required textbook for this class will be:

Balbridge, Scott. *Geology of the American Southwest*. Cambridge, England: Cambridge University Press, 2004.

Students will also read and discuss primary scientific literature and selections from other texts and guidebooks listed below to gather background information for the specific projects to be conducted during GEOS 406.

VIII. Special resource requirements

There are no special resource requirements for this course.

IX. Bibliography

The following will be among the published resources used to develop the course curriculum:

Baldrige, W. Scott (2004) *Geology of the American Southwest: A Journey Through Two Billion Years of Plate-Tectonic History*. Oxford University Press, 297 pp.

Beus, Stanley. (2002) *Grand Canyon Geology*. Oxford University Press, 448 pp.

Chronic, Halka & Chronic, Lucy (2004) *Pages of Stone: Geology of Grand Canyon & Plateau Country National Parks & Monuments*. Mountaineers Books, 176 pp.

Cowan, Darrel S., Cladouhos, Trenton T., Morgan, Julia K. (2003) Structural geology and kinematic history of rocks formed along low-angle normal faults, Death Valley, California: *Geol Soc Am Bull* 2003 v. 115. p. 1230-1248.

Duffield, Wendell A. (1998) *Volcanoes of Northern Arizona: Sleeping Giants of the Grand Canyon Region*. Grand Canyon Association, 68 pp.

Harris, Ann G., Tuttle, Sherwood D. and Tuttle, Esther (2003) *Geology of National Parks*. Kendall Hunt, 898 pp.

Hildreth, W. (2003) Volcanological perspectives on Long Valley, Mammoth Mountain, and Mono Craters: several contiguous but discrete systems: *Journal of Volcanology and Geothermal Research*, v. 126, iss. 3-4, p. 169-198.

Hill, Mary (2005) *Geology of the Sierra Nevada*. University of California Press, 246 pp.

Hung, Mark, Shoukour, Simon J., Nottiff, Ronald, and Goff, John (2005) *Geology of the Grand Canyon*. Grand Canyon Association, 68 pp.

Department's program revisions is to make field-based courses more accessible to students earlier in their IUP career. This course is designed to provide a common knowledge base and

skill set for majors and minors of all levels who may then take GEOS 406.

Does this require any changes in the content of existing courses or requirements for a

program?

This course does not require changing the existing content of any other courses or requirements for any program.

A3. Has this course been offered at IUP on a trial basis?

This course has never been offered in the Geoscience Department.

A4. Is this course to be a dual-level course?

This course is not a dual-level course.

A5. If this course may be taken for variable credit, what criteria will be used to relate the credits to the learning experience of each student?

This course cannot be taken for variable credit.

A6. Do other higher education institutions currently offer this course? If so, please list examples.

Virtually all higher education institutions with programs in geology or earth sciences offer courses in the geology of particular regions of interest. These courses come in a number of forms:

- a. Classroom space is currently adequate to teach this course.
b. There is no special equipment required to teach this course.

- c. There are no laboratory supplies or other consumable goods required for this course beyond those already possessed by the Geoscience Department.
d. Library materials are currently adequate for this course.
e. There will be no additional travel expenses.

- C3. Are any of the resources for this course funded by a grant?**
No resources for this course are currently funded by a grant.

- C4. How frequently do you expect this course to be offered?**
The department expects that this course will be offered every other year.

- C5. How many sections of this course do you anticipate offering in any single semester?**
We anticipate offering a single section of this course in a given semester.

- C6. How many students do you plan to accommodate in a section of this course?**
We plan to accommodate no more than 24 students in this course. This is the maximum number of students that can be accommodated in the Geoscience Department's teaching laboratory.

- C7. Does any professional society recommend enrollment limits or parameters for a course of this nature?**
No professional society recommends enrollment limits or parameters for this course.

- C8. Not applicable.**

Section D: Miscellaneous

None.

Part III. Letters of Support or Acknowledgment

There are no letters in the attached program revisions that directly pertain to this new course.