# Course Change Proposal
## Form A

<table>
<thead>
<tr>
<th>Academic Group (College):</th>
<th>Academic Organization (Department):</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Science and Math</td>
<td>GEOLOGY</td>
<td>April 15, 2010</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type of Course Proposal:</th>
<th>Department Chair:</th>
<th>Submitted by:</th>
</tr>
</thead>
<tbody>
<tr>
<td>New <em>X</em></td>
<td>Change ___ Deletion ___</td>
<td>Dave Evans</td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th>Does this course fulfill a requirement for single-subject or multiple subject credential students?</th>
<th>For Catalog Copy:</th>
<th>CCE (Extension):</th>
<th>Semester Effective:</th>
</tr>
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<tbody>
<tr>
<td>Yes ___ No <em>X</em></td>
<td>Yes <em>X</em> No ___</td>
<td>Yes ___ No ___</td>
<td>Fall ___ Spring <em>X</em>, 2011</td>
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This course replaces experimental course Subject Area (prefix) and Catalog Nbr (course number):

If changing an existing course, should new version be considered a repeat of the original version? If so, the same Course ID will be maintained. If not, a new Course ID will be assigned. Note: In PeopleSoft terminology, the Course ID is the unique system identifier, not the Catalog Nbr.

Yes ___ No ___

## New Course:

<table>
<thead>
<tr>
<th>Subject Area (prefix) &amp; Catalog Nbr (course no.):</th>
<th>Title:</th>
<th>Units:</th>
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<tbody>
<tr>
<td>GEOL 188</td>
<td>Advanced Geologic Mapping</td>
<td>5</td>
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## JUSTIFICATION:

An advanced geologic mapping course is a standard requirement for all BS geology degrees in the country. The Geology BS degree at Sacramento State has always required this course but we have never taught it or given students unit credit for it. Rather, it has been a graduation requirement and we have required our students to take the course at one of several other university programs. Unfortunately, we have no control or oversight of the curriculum at the other university courses.

By offering our own advanced field mapping course we will have better control over the curriculum, student experience, risk management and the pedagogical fit to our program. In addition, we will be able to offer the course for a significantly lower course fee than that charged to our students by other universities (most are $3000-$4000; ours will be less than $3000 per student).

Furthermore, in offering the course we have the opportunity to introduce some modern-mapping-methods that are included in the licensure examination for professional geologists (viz. air photo analysis, GPS, GIS).

## NEW COURSE DESCRIPTION: (Not to exceed 80 words, and language should conform to catalog copy. See http://www.csus.edu/umanual/acad.htm - Guidelines for Catalog Course Description)

Advanced principles/methods of geologic mapping, interpretation and geologic report writing for selected field areas in the western United States. Mapping techniques include the use of aerial photographs and global position systems. Consists of on-campus field preparation and off-campus fieldwork. Fee course.

**Note:**

Prerequisite: GEOL 111A, GEOL 111B, GEOL 110B, or permission of instructor.

Enforced at Registration: Yes ___ No _X_

Corequisite: Enforced at Registration: Yes ___ No _X_

Graded: Letter _X_ Credit/No Credit ___

Instructor Approval Required? Yes ___ No _X_

Course Classification (e.g., lecture, lab, seminar, discussion):

C-16 (Science Laboratory) Title for CMS (not more than 30 characters) Advanced Geologic Mapping

Cross Listed? Yes ___ No _X_

If yes, do they meet together and fulfill the same requirement, and what is the other course.

How Many Times Can This Course be Taken for Credit? ___ 1 ___

Can the course be taken for Credit more than once during the same term? Yes ___ No _X_
FOR NEW COURSE PROPOSALS OR SUBSTANTIVE CHANGES ONLY:

**Description of the Expected Learning Outcomes:** Describe outcomes using the following format: “Students will be able to: 1), 2), etc.” See the example at http://www.csus.edu/acaf/example.htm

Learning Outcomes. Students will be able to:
1) create detailed geologic maps of complex geologic areas;
2) use modern methods in their mapping, such as aerial photographs and GPS;
3) create additional illustration of geologic field relationships, such as stratigraphic sections and cross sections;
4) interpret the geologic field relationships in written field reports.

**Attach a list of the required/recommended course readings and activities [Note: it is understood that these are updated and modified as needed by the instructor(s).] This attachment should be forwarded only to your Dean’s office, not Academic Affairs.**

**Assessment Strategies:** A description of the assessment strategies (e.g., portfolios, examinations, performances, pre-and post-tests, conferences with students, student papers) which will be used by the instructor to determine the extent to which students have achieved the learning outcomes noted above:

Students will prepare geologic maps, stratigraphic sections, cross sections, and written reports on selected field areas. These materials will be graded by the instructor to determine the extent to which students have achieved the learning outcomes.

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**For whom is this course being developed?**
Majors in the Dept __ X __ Majors of other Depts ___ Minors in the Dept ___ General Education ___ Other ___

Is this course required in a degree program (major, minor, graduate degree, certificate)? Yes __ X __ No ___
If yes, identify program(s): Geology Bachelor of Science degree

Does the proposed change or addition cause a significant increase in the use of College or University resources (lab room, computer facilities, faculty, etc.)? Yes ___ No __ X __

Note: This course will require a substantial course fee. This course will be offered in the summer through CCE.

If yes, attach a description of resources needed and verify that resources are available.

Indicate which department or programs will be affected by the proposed course (if any). ________________________________________________________________

The Department Chair’s signature below indicates that affected programs have been sent a copy of this proposal form.

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**Approvals:** If proposed change, new course or deletion is approved, sign and date below. If not approved, forward without signing to the next reviewing authority, and attach an explanatory memorandum to the original copy.

<table>
<thead>
<tr>
<th>Signatures:</th>
<th>Date</th>
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<tbody>
<tr>
<td>Department Chair:</td>
<td>1/20/10</td>
</tr>
<tr>
<td>College Dean or Associate Dean:</td>
<td>1/20/10</td>
</tr>
<tr>
<td>CPSP (for school personnel courses ONLY)</td>
<td></td>
</tr>
<tr>
<td>Associate Vice President and Dean for Academic Programs</td>
<td></td>
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Distribution: Academic Affairs (original), Department Chair and College Dean, Dean’s office to send original after approval to Academic Affairs, at mail zip 6016. An electronic copy must also be sent.

9/10/2008