



SACRAMENTO
STATE

Course Change Proposal Form A



Academic Group (College): Engineering & Computer Science	Academic Organization (Department): Mechanical Engineering	Date: March 12, 2009
Type of Course Proposal: New ___ Change <u>X</u> Deletion ___	Department Chair: Susan L. Holl	Submitted by: Susan L. Holl
Does this course fulfill a requirement for single-subject or multiple subject credential students? Yes ___ No <u>X</u>	For Catalog Copy: Yes <u>X</u> No ___ CCE (Extension): Yes ___ No ___	Semester Effective: Fall <u>X</u> Spring ___, 2009__

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 <u>X</u> No ___

Change from:

Subject Area (prefix) & Catalog Nbr (course no.): ME 180	Title: Mechanical Properties of Materials	Units: 4
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Change to:

Subject Area (prefix) & Catalog Nbr (course no.): ME 180	Title: Mechanical Properties of Materials	Units: 3
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JUSTIFICATION:

The focus of this course will be returned to metals and understanding the conventional materials used in mechanical engineering design. Additional material will be presented in elective courses.

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

Principles of mechanical properties of metals, including strength under combined loads, fatigue, and fracture mechanics. Laboratory includes study of strengthening mechanisms, and principles of experimental stress analysis. Lecture two hours; Laboratory three hours.

Note:

Prerequisite: ENGR 112
Enforced at Registration: Yes X No ___

Corequisite:
Enforced at Registration: Yes ___ No ___

Graded: Letter X Credit/No Credit ___ **Instructor Approval Required? Yes ___ No X**

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

Title for CMS (not more than 30 characters):
Mech Properties of Materials

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>

By the end of the semester, the student will be able to:

- describe microstructural relationships to macroscopic properties;
- describe the effects and limitations of alloying;
- describe the processes and effects of standard heat treatments;
- conduct and interpret the results from standard mechanical tests;
- evaluate the stress-strain relationships for simple and complex loading situations;
- evaluate yielding and fracture behaviors;
- use analytical methods to predict material behavior;
- use models for evaluating deformation behavior;
- use stress-based and strain-based approaches to fatigue;
- use experimental data to evaluate stress and strain in complex loading situations.

**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:

Homework, exams, quizzes, lab reports

For whom is this course being developed?

Majors in the Dept 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 No

If yes, identify program(s): B.S. in Mechanical Engineering

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

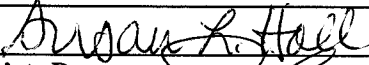
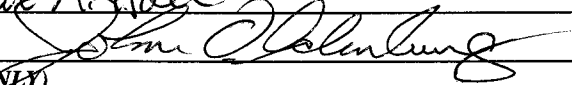
If yes, attach a description of resources needed and verify that resources are available.

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.

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.

Signatures:

	Date
Department Chair: 	4/24/09
College Dean or Associate Dean: 	4/29/09
CPSP (for school personnel courses <i>ONLY</i>)	
Associate Vice President and Dean for Academic Programs	

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.