



SACRAMENTO  
STATE

# Course Change Proposal Form A



<b>Academic Group (College):</b> Engineering and Computer Science	<b>Academic Organization (Department):</b> Mechanical Engineering	<b>Date:</b> 3/10/09
<b>Type of Course Proposal:</b> New <input checked="" type="checkbox"/> Change <input type="checkbox"/> Deletion <input type="checkbox"/>	<b>Department Chair:</b> Susan L. Holl	<b>Submitted by:</b> Kenneth Sprott
<b>Does this course fulfill a requirement for single-subject or multiple subject credential students?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<b>For Catalog Copy:</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> <b>CCE (Extension):</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<b>Semester Effective:</b> Fall <input type="checkbox"/> Spring <input checked="" type="checkbox"/> 20_10__

<b>This course replaces experimental course Subject Area (prefix) and Catalog Nbr (course number):</b>	
<b>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.</b>	Yes <input type="checkbox"/> No <input type="checkbox"/>

**Change from:**

<b>Subject Area (prefix) &amp; Catalog Nbr (course no.):</b>	<b>Title:</b>	<b>Units:</b>
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**Change to:**

<b>Subject Area (prefix) &amp; Catalog Nbr (course no.):</b> ME 117	<b>Title:</b> Machinery Design II	<b>Units:</b> 2
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**JUSTIFICATION:**

This is a new course part of a two course sequence which will replace ME 118 and ME 119 in the Mechanical Engineering Curriculum. The course content is designed to cover the essential elements of mechanical design and eliminate redundancies in the current course content.

**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)

Introduction to design of machine components; application of analytical methods in the design of complex machines. Design of common machine elements such as threaded fasteners, springs, flexible drive components, gears, and friction devices. Introduction to stress and deflection analysis using finite element software.

**Note:**

<b>Prerequisite:</b> ME 116 <b>Enforced at Registration:</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
<b>Corequisite:</b> <b>Enforced at Registration:</b> Yes <input type="checkbox"/> No <input type="checkbox"/>	
<b>Graded:</b> Letter <input checked="" type="checkbox"/> Credit/No Credit <input type="checkbox"/>	<b>Instructor Approval Required?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
<b>Course Classification (e.g., lecture, lab, seminar, discussion):</b> lecture	<b>Title for CMS (not more than 30 characters):</b> MACHINERY DESIGN II
<b>Cross Listed?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<b>If yes, do they meet together and fulfill the same requirement, and what is the other course.</b>

**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

**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>

- The student will be able to:
1. Design and size threads used in power screws and in threaded fasteners. Design and size machine components which use threaded fasteners.
  2. Design and size gears and gear boxes for use in machine components.
  3. Design and select flexible drive components used in machine applications.
  4. Design and select springs used in machine applications.
  5. Design and select friction devices such as brakes and clutches.
  6. Use finite element software to determine stresses in a machine component.
  7. Work on a team to design a mechanical system.

**\*\*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 assignments, examinations, design projects

**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): 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: <i>Dusan Z. Holly</i>	4/24/09
College Dean or Associate Dean: <i>John Olabunju</i>	4/24/09
CPSP (for school personnel courses ONLY)	
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.