

## COURSE MODIFICATION PROPOSAL

College: [ **Engineering and Computer Science** ] Department: [ **Manufacturing Systems Engineering & Management** ]

### 1. Current Catalog Entry Information:

Subject Abbreviation and Number: [ **MSE 227** ]

Course Title: [ **Engineering Materials** ]

Units: [ **3** ] units

General Education Section [ ] (if applicable)

### 2. Date of Proposed Implementation: (Semester/Year): [ **Fall** ] / [ **2016** ] *Comments*

### 3. Course Level:

Undergraduate Only     Graduate Only     Graduate/Undergraduate

### 4. Nature of Request:

Delete Course (*Note: Record of course will remain in inactive course file*)

Change unit value from [ ] units to [ ] units

Change course type (classification) such as lecture-discussion, laboratory, activity, etc.:

**From:** [ ] units @ [ ] [ ] to [ ] units @ [ ] [ ]

**From:** [ ] units @ [ ] [ ] to [ ] units @ [ ] [ ]

Change course title to: [ ]

Change course abbreviation “Short title” (Maximum of 17 characters and spaces) to

NEW Short Title: [ . . . . . ]

Change current catalog course description (*Attach current and proposed catalog course description*)

**Notes:** If grading is NC/CR only, please state in course description. If a course numbered less than 500 is available for graduate credit, please state “Available for graduate credit in the catalog description.”

Change subject abbreviation number to: (*Example: HSCI 100 to PT 105*) [ ]

Change requisites (*Prerequisites, Corequisites, Preparatory, Recommended Corequisites*)

**From:** [ **Prerequisite: MATH 150A. Preparatory: CHEM 101/L; PHYS 220A/L.** ]

**To:** [ **Prerequisites: MATH 150A, CHEM 101/L, PHYS 220A/L.** ]

Change Current Basis of Grading

**From:**  Credit/No Credit Only     Letter Grade Only     CR/NC or Letter Grade

**To:**  Credit/No Credit Only     Letter Grade Only     CR/NC or Letter Grade

Add course to GE Section [ ]

- Remove course from GE Section [       ]
- Change course from GE section [       ] to GE section [       ]
- Change course to a Community Service Learning course (CS)
- Allow multiple enrollments within a semester.
- Change number of times this course may be taken:  
     May be taken for credit for a total of [1] times, or for a maximum of [1] units
- Multiple enrollments are allowed within a semester
- Crosslist this course with [       ]
- Other: [       ]

**5. Justification and Clarification of Request** *(Attach)*

**6. Estimated Impact on Resources within the Department, for other Departments and the University.***(Attach)*

*(See Resource List)*

**7. Impact on other Departments’ programs** *(Attach)*

**8. Indicate which of the Program’s Measurable Student Learning Outcomes are addressed in this course.** *(Attach)*

*(see Course Alignment Matrix and the Course Objectives Chart)*

**9. If this is a General Education course, indicate how the General Education Measurable Student Learning Outcomes (from the appropriate section) are addressed in this course.** *(Attach)*

**10. Methods of Assessment for Measurable Student Learning Outcomes** *(Attach)*

- A. Assessment tools
- B. Describe the procedure dept/program will use to ensure the faculty teaching the course will be involved in the assessment process (refer to the university’s policy on assessment.)

**11. Record of Consultation:** *(Normally all consultation should be with a department chair or program coordinator.) If more space is needed attach statement and supporting memoranda.*

| Date:        | Dept/College: | Department Chair/Program Coordinator | Concur (Y/N) |
|--------------|---------------|--------------------------------------|--------------|
| [ 2/6/2015 ] | [ CECM/CECS ] | [ N. Dermendjian ]                   | [ Y ]        |
| [ 2/6/2015 ] | [ CS/CECS ]   | [ R. Covington ]                     | [ Y ]        |
| [ 2/6/2015 ] | [ ECE/CECS ]  | [ A. Amini ]                         | [ Y ]        |
| [ 2/6/2015 ] | [ ME/CECS ]   | [ H. Johari ]                        | [ Y ]        |
| [ 2/6/2015 ] | [ MSEM/CECS ] | [ K. Chang ]                         | [ Y ]        |
| [       ]    | [       ]     | [       ]                            | [ IP ]       |

Consultation with the Oviatt Library is **recommended** for course modifications to ensure the

availability of appropriate resources to support proposed course curriculum.

**Collection Development Coordinator, Mary Woodley**

**Please send an email to:** collection.development@csun.edu

**Date**

[      ]

## 12. Approvals:

|                                       |                     |
|---------------------------------------|---------------------|
| Department Chair/Program Coordinator: | Date: [ 2/6/2015 ]  |
| College (Dean or Associate Dean):     | Date: [ 3/25/2015 ] |
| Educational Policies Committee:       | Date: [      ]      |
| Graduate Studies Committee:           | Date: [      ]      |
| Provost:                              | Date: [      ]      |

## 5. Justification and Clarification of the Request

It is essential for engineering students to take CHEM 101/L and PHYS 220A/L before taking MSE 227. It was found that students who didn't take CHEM 101/L and PHYS 220A/L before taking MSE 227 had a much higher possibility of course failure than students who had completed those courses. Therefore it is necessary to change CHEM 101/L and PHYS 220A/L from preparatory to prerequisite.

### Existing Course Description

#### **MSE 227. Engineering Materials (3)**

Prerequisite: MATH 150A. Preparatory: CHEM 101/L; PHYS 220A/L. Introductory course in engineering materials, including metals, ceramics, polymers and composites. Study of atomic and crystalline structures of materials. Application of basic principles to study of mechanical, physical and chemical behavior of materials. Selection of materials in engineering applications based on above criteria. Design project on materials properties, selection, or application. 3 hours lecture per week.

### Proposed Course Description

#### **MSE 227. Engineering Materials (3)**

Prerequisites: MATH 150A, CHEM 101/L, PHYS 220A/L. Introductory course in engineering materials, including metals, ceramics, polymers and composites. Study of atomic and crystalline structures of materials. Application of basic principles to study of mechanical, physical and chemical behavior of materials. Selection of materials in engineering applications based on above criteria. Design project on materials properties, selection, or application. 3 hours lecture per week.

## 6. Estimated Impact on Resources

There is no impact, because the change will only affect the timing of when these courses are taken.

## 7. Impact on other Departments

There is no impact, because the change will only affect the timing of when these courses are taken.