



# MISSOURI UNIVERSITY OF SCIENCE AND TECHNOLOGY

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*Formerly University of Missouri-Rolla*

## Agenda

Campus Curricula Committee Meeting

August 15, 2011

11 a.m. Room 117 Fulton Hall

Approval of the May 4, 2011 minutes.

### **Review of submitted EC forms:**

EC 2344, Geological Engineering 401, Fundamentals of Rock Mechanics, effective Fall 2011.

EC 2349, Ceramic Engineering 301, Diffraction Theory and Practice, effective Fall 2011.

EC 2351, Mechanical Engineering 401, Mechanics of Machinery, effective Fall 2011.

### **Special Agenda Item:**

The committee will be determining their meeting dates and time for the upcoming academic year and will also be electing the 2011-2012 CCC Chair.

Effective Year: 2011  
Effective Term: Summer  Fall  Spring

EC File # 2344-FB2011-GE-401

# Experimental Course Form (EC)

An EC form must be submitted before an experimental course is to be offered. EC forms approved SP2009 or later allow the course to be offered twice at any time during the following three year period. After an experimental course has been offered twice, a CC form may be submitted to request a permanent course number.

A new course that is required as part of a degree program, minor, or graduate certificate may be submitted on a CC form to receive a permanent course number

Co-listed offerings should be submitted on one form, originating from the primary discipline.

Department: Geol Science & Engineering

Discipline and Course Number: GE 401

Course Title: Fundamentals of Rock Mechanics

Abbreviated Title (24 spaces or less): Fund Rk Mech

Instructor(s): Gertsch

Credit Hours: Lecture: 3 Lab: 0 Total: 3

Prerequisites: IDE 110

Semester(s) previously taught: none

**Brief Course Description: (40 words or less)**

This course is a graduate-level introduction to and review of geomechanics, with emphasis on topics pertinent to geological engineering in continuous and discontinuous rock masses. Offered in both distance and on-campus modes.

List all co-listed courses: Include initials of Dept. Chair, if signature is not already included below.

- 1) \_\_\_\_\_ 2) \_\_\_\_\_ 3) \_\_\_\_\_
- 4) \_\_\_\_\_ 5) \_\_\_\_\_ 6) \_\_\_\_\_

Department Chair: Abdul Wajid (Chair Signature) Date: 4-18-11

Discipline Specific Curricula Committee: \_\_\_\_\_ (Chair signature) Date: \_\_\_\_\_

Curricula Committee: \_\_\_\_\_ (Chair Signature) Date: \_\_\_\_\_

Effective Year: 2011  
Effective Term: Summer  Fall  Spring

EC File # 2349-FS 2011-Cer Eng-301

## Experimental Course Form (EC)

An EC form must be submitted before an experimental course is to be offered. EC forms approved SP2009 or later allow the course to be offered twice at any time during the following three year period. After an experimental course has been offered twice, a CC form may be submitted to request a permanent course number.

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Co-listed offerings should be submitted on one form, originating from the primary discipline.

Department: Materials Science and Engineer

Discipline and Course Number: Cer Eng 301

Course Title: Diffraction Theory and Practice

Abbreviated Title (24 spaces or less): Diffraction

Instructor(s): Bill Fahrenholtz and Eric Bohannon

Credit Hours:      Lecture: 2                  Lab: 1                  Total: 3

Prerequisites: Cer 291 or instructor approval

Semester(s) previously taught: none

Brief Course Description: (40 words or less)

The relationship between crystallographic symmetry and diffraction of x-ray and electron beams will be explored. Theoretical aspects will be addressed in lectures dealing with diffraction theory such as structure factor calculations. Laboratory exercises will emphasize practical aspects of diffraction analysis using state-of-the-art instruments.

List all co-listed courses: Include initials of Dept. Chair, if signature is not already included below.

- 1)                                  2)                                  3)
- 4)                                  5)                                  6)

Department Chair: \_\_\_\_\_  
(Chair Signature)

Date: 7/8/11

Discipline Specific Curricula Committee: \_\_\_\_\_  
(Chair signature)

Date: \_\_\_\_\_

Curricula Committee: \_\_\_\_\_  
(Chair Signature)

Date: \_\_\_\_\_

EC File # 2351-FS2011-ME-401

Effective Year: 2011  
Effective Term: Summer  Fall  Spring

## Experimental Course Form (EC)

An EC form must be submitted before an experimental course is to be offered. EC forms approved SP2009 or later allow the course to be offered twice at any time during the following three year period. After an experimental course has been offered twice, a CC form may be submitted to request a permanent course number.

A new course that is required as part of a degree program, minor, or graduate certificate may be submitted on a CC form to receive a permanent course number

Co-listed offerings should be submitted on one form, originating from the primary discipline.

Department: Mech. and Aerosp. Engineering

Discipline and Course Number: ME 401

Course Title: Mechanics of Machinery

Abbreviated Title (24 spaces or less):

Instructor(s): Ashok Midha

Credit Hours: Lecture: 3 Lab: 0 Total: 3

Prerequisites: Vector & matrix analysis; introductory planar kinematic & dynamic analysis of mechanisms; ME 304 or equivalent, with consent of instructor

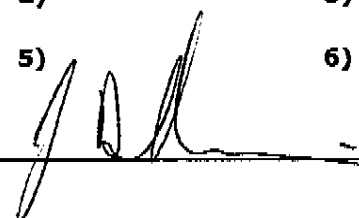
Semester(s) previously taught: None

Brief Course Description: (40 words or less)

Rigid-body kinematics, dynamics and synthesis of mechanisms; cam-follower mechanisms; mathematical modeling of mechanisms containing elastic elements; transient and steady-state vibration response; parametric instability in elastic mechanisms; advanced topics in compliant mechanisms; high performance mechanisms will be emphasized

List all co-listed courses: Include initials of Dept. Chair, if signature is not already included below.

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|----|----|----|
| 1) | 2) | 3) |
| 4) | 5) | 6) |

Department Chair:  \_\_\_\_\_  
(Chair Signature)

Date: 7/12/2011

Discipline Specific Curricula Committee: \_\_\_\_\_  
(Chair signature)

Date: \_\_\_\_\_

Curricula Committee: \_\_\_\_\_  
(Chair Signature)

Date: \_\_\_\_\_