



Minutes

Campus Curricula Committee Meeting

September 5, 2012

12 p.m., Room 117 Fulton Hall

Attendees: Lahne Black, Barry Flachsbart, Angie Huffman, Irina Ivliyeva, Keith Nisbett, Steve Raper, Daniel Tauritz, and Jennifer Thorpe.

The committee approved the minutes from the previous meetings of May 2, 2012 and August 14, 2012. The following curriculum forms were also discussed and approved:

Degree Change Forms:

DC #0423

Course Change Forms:

CC #8244

CC #8269

CC #8270

CC #8273

Experimental Course Forms:

EC #2427

Form CC # 8232 remains tabled. The committee voted to table the items below for further action/clarification to be provided by the responsible academic department for each:

CC #8262

CC #8263

CC #8264

CC #8265

The Registrar's Office was requested to study the viability of expanding the character limit of the course description field on EC and CC forms by 20%.

The CCC voted and approved the following two operational changes:

- (1) Minutes will from now on be circulated to the CCC members as soon as possible after CCC meetings and in the absence of any objections within 24 hours, they will be



MISSOURI UNIVERSITY OF SCIENCE AND TECHNOLOGY

Formerly University of Missouri-Rolla

- considered approved. This change will ensure that all curriculum forms submitted to the Faculty Senate for approval will already have been formally approved by the CCC.
- (2) To provide the campus with more detailed information on the curriculum forms being approved by the CCC, they will starting with FS2012 be scanned after final edit and posted on the CCC website; the CCC minutes and report to Faculty Senate will accordingly only list the approved form numbers and refer to the posted scanned forms.

The meeting adjourned at 1:01 p.m.

A handwritten signature in cursive script, appearing to read "Daniel Tauritz", written over a horizontal line.

Daniel Tauritz, Chair
Missouri S&T Campus Curricula Committee

FS 2013

~~SP 2013~~

Effective Year: ~~FS2012~~

Effective Term: Summer Fall Spring

(Creating or modifying a degree program must be effective for a Fall term)

DC # 0423-2012-EE-000-00

Degree Change Form (DC)

This form is to be used for creating or modifying degree programs, emphasis areas, and minors.

Title of degree program, emphasis area, or minor:

Electrical Engineering B.S. Program with Power and Energy Emphasis

Department: Electrical & Computer Engineering

Briefly describe action requested (Attach documentation as appropriate):

Add EE 353 Power Electronics as an additional approved elective for EE Elective D or Elective E in the EE B.S. with Power and Energy Emphasis.

The emphasis area change will be added to students' CAPS/Audit report.

The catalog description for emphasis areas will be changed accordingly. The old description for the power and energy course list is "Power and Energy: El Eng 205 or 207, and 30X (Excluding El Eng 200, 201, 202, 300, and 301 Course)" The new description for the power and energy course list will be "Power and Energy: El Eng 205 or 207, 353, and 30X (Excluding El Eng 200, 201, 202, 300, and 301 Course)"

Recommended by Department: Rebi Eeckhuys
(Chair signature)

Date: 16 Apr 2012

Recommended by Discipline Specific Curricula Committee: Steve Watkins
(Chair signature)

Date: 5/9/12

Approved by Curricula Committee: Daniel Lait
(Chair signature)

Date: 9/11/2012

Approved by Faculty Senate: _____
(Chair signature)

Date: _____

Effective Year: ~~2012~~ ²⁰¹³

CC File # 8244-2012-CpE-358-32

Term: Summer Fall Spring

Course Change Form (CC)

This form is for creating or modifying permanent courses.

Course Changes (Check all changes.)

New Course Course Deletion Credit Hours Prerequisites
Course Title Catalog Description Course Number Co-listing

Course Information (1-9 Must Be Completed. Leave "Proposed" items blank if no change is being made.)

- 1. Department: Elec & Computer Engr
- 2. Discipline and Course Number: Present : CpE 358 Proposed:
- 3. Course Title: Present: Computational Intelligence Proposed:

Abbreviated Course Title: (24 Spaces or Less. Only needed for New Courses or Title Changes.)

4. Catalog Description (300 Character Spaces or Less.)

Present: Intro to Computational Intelligence, Biological & Artificial Neuron, Neural Networks, Evolutionary Computing, Swarm Intelligence, Artificial Immune Systems, Fuzzy Systems & Hybrid Systems, CI Application case studies covered include digital systems, control, power systems, forecasting & time-series predictions.

Proposed:

5. If course requires field trip check box:

6. Credit Hours: Present: Lecture: 3 Lab: 0 Total: 3
Proposed: Lecture: Lab: Total:

7. Prerequisites:
Present: Statistics 217
Proposed: CS 153 or programming competency

8. Required for Majors: Elective for Majors:

9. Justification: Current prerequisites out of date. Students will undertake programming-based projects to demonstrate CI techniques. Students will need programming competency.

10. Semesters previously offered as an experimental course (101, 201, 301, 401):

11. List all co-listed courses, initialed by Dept. Chair, if signature does not appear below.

- 1) EE 367 *SW* 2) 3)
- 4) SySE 367 *DLE* 5) 6)

Recommended by Department: Kahn Emilian Date: 20 Mar 2012
(Chair signature)
Recommended by Discipline Specific Curricula Committee: Steve Wathen Date: 5/9/12
(Chair signature)
Approved by Curricula Committee: David Jantz Date: 9/11/2012
(Chair signature)
Approved by Faculty Senate: _____ Date: _____
(Chair signature)

Effective Year: ~~2012~~ 2013
Effective Term: Summer Fall Spring

CC File # 8269-2012-Sp+M-275-32

Course Change Form (CC)

This form is for creating or modifying permanent courses.

Course Changes (Check all changes.)

New Course Course Deletion Credit Hours Prerequisites
Course Title Catalog Description Course Number Co-listing

Course Information (1-9 Must Be Completed. Leave "Proposed" Items blank if no change is being made.)

1. Department: ALP
2. Discipline and Course Number: Present : SP&M 275 Proposed:
3. Course Title: Present: Foundations of Video Communication
Proposed: Foundations of Media Communication

Abbreviated Course Title:
(24 Spaces or Less. Only needed for New Courses or Title Changes.)

4. Catalog Description (40 Words or Less)
Present: See catalog

Proposed: The course explores the historical, social, & psychological impact of media through study and practice of academic and non-academic theories of effective media communication. The course supplies an integrated critical framework for application in students' day-to-day consumption of media.

5. If course requires field trip check box:

6. Credit Hours: Present: Lecture: 3 Lab: Total: 3
Proposed: Lecture: Lab: Total:

7. Prerequisites:
Present: SP&M 181 or consent of Instructor

Proposed: None *Sp&M 85*

8. Required for Majors: Elective for Majors:

9. Justification: Curriculum and scope of course has been altered and an update is fair and necessary for students. Accuracy is the justification.

10. Semesters previously offered as an experimental course (101, 201, 301, 401):

11. List all co-listed courses, Initialed by Dept. Chair, if signature does not appear below.

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

Recommended by Department *[Signature]* (Chair signature) Date: _____

Recommended by Discipline Specific Curricula Committee *[Signature]* (Chair signature) Date: 5/30/10

Approved by Curricula Committee: *[Signature]* (Chair signature) Date: 9/11/2012

Approved by Faculty Senate: _____ (Chair signature) Date: _____

CC File # 8270-2012-ME-463-10

Effective Year: 2013
Term: Summer Fall Spring

Course Change Form (CC)

This form is for creating or modifying permanent courses.

Course Changes (Check all changes.)

New Course Course Deletion Credit Hours Prerequisites
Course Title Catalog Description Course Number Co-listing

Course Information (1-9 Must Be Completed. Leave "Proposed" items blank if no change is being made.)

- 1. Department: Mechanical and Aerospace Eng.
- 2. Discipline and Course Number: Present : ~~Mc Eng 401~~ Proposed: Mc Eng 463
- 3. Course Title: Present: **Advanced Digital Design and Manufacturing**
Proposed: **Advanced Digital Design and Manufacturing**

Abbreviated Course Title:
(24 Spaces or Less. Only needed for New Courses or Title Changes.)

4. Catalog Description (300 Character Spaces or Less.)

Present: This course covers selective topics essential to advanced digital design and manufacturing. These topics include freeform modeling, reverse engineering, NC path generation, and immersive digital design and manufacturing. Students will learn theoretical and practical materials on the various topics.

Proposed: This course covers freeform modeling, reverse engineering, numerical control path generation for material removal and addition, and virtual reality based digital design and manufacturing. Students learn theoretical and fundamental aspects of these topics from lectures and project exercises.

5. If course requires field trip check box:

6. Credit Hours:	Present:	Lecture: 3	Lab: 0	Total: 3
	Proposed:	Lecture: 3	Lab: 0	Total: 3

7. Prerequisites:
Present: Mc Eng 308 or Mc Eng 363

Proposed: Mc Eng 308 or Mc Eng 363 or similar course

8. Required for Majors: Elective for Majors:

9. Justification: This course has been previously offered as an Mc Eng 401 experimental course for two semesters, with 10 students registering in the spring 2011 semester and 8 students registering in the spring 2012 semester.

10. Semesters previously offered as an experimental course (101, 201, 301, 401): 2

11. List all co-listed courses, initialed by Dept. Chair, if signature does not appear below.

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

Recommended by Department [Signature]
(Chair signature)

Recommended by Discipline Specific Curricula Committee [Signature]
(Chair signature)

Approved by Curricula Committee: [Signature]
(Chair signature)

Approved by Faculty Senate: _____
(Chair signature)

Date: 7/12/2012
Date: 9/4/12
Date: 9/11/2012
Date: _____

(Revised 1/29/09)

Effective Year: 2013

Term: Summer Fall Spring

Course Change Form (CC)

This form is for creating or modifying permanent courses.

Course Changes (Check all changes.)

New Course Course Deletion Credit Hours Prerequisites
Course Title Catalog Description Course Number Co-listing

Course Information (1-9 Must Be Completed. Leave "Proposed" items blank if no change is being made.)

1. Department: MAE

2. Discipline and Course Number: Present : Proposed: Ae Eng 414

3. Course Title: Present: Proposed: Advanced Astrodynamics

Abbreviated Course Title: Adv Astrodynamics
(24 Spaces or Less. Only needed for New Courses or Title Changes.)

4. Catalog Description (300 Character Spaces or Less.)
Present:

Proposed: Analysis of spacecraft motion using different dynamic models and perturbations. Using the state transition matrix and differential corrections technique for trajectory computation. Introduction to the three-body problem. Use of computational and numerical methods to solve astrodynamic problems.

5. If course requires field trip check box:

6. Credit Hours: Present: Lecture: Lab: Total:
Proposed: Lecture: 3 Lab: 0 Total: 3

7. Prerequisites:
Present:

Proposed: Ae Eng 314

8. Required for Majors: Elective for Majors:

9. Justification: Course has been offered twice and is to be added as a regular permanent offering.

10. Semesters previously offered as an experimental course (101, 201, 301, 401): Sum '06, Spring '11

11. List all co-listed courses, initialed by Dept. Chair, if signature does not appear below.

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

Recommended by Department [Signature]
(Chair signature)

Date: 8/1/2012

Recommended by Discipline Specific Curricula Committee [Signature]
(Chair signature)

Date: 9/11/12

Approved by Curricula Committee: [Signature]
(Chair signature)

Date: 9/11/2012

Approved by Faculty Senate: _____
(Chair signature)

Date: _____

Effective Year: 2013
Effective Term: Summer Fall Spring

EC File # 2427-Sp2013-ME-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.

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: MAE

Discipline and Course Number: Mc Eng 301

Course Title: Viscoelastic Materials: Modeling and Applications

Abbreviated Title (24 spaces or less): Viscoelasticity

Instructor(s): Gearoid MacSithigh

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

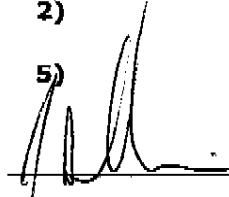
Prerequisites: CE 110, Math 204

Semester(s) previously taught: None

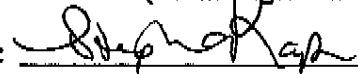
Brief Course Description: (40 words or less) *Course topics include:*
Viscoelastic phenomena, Stress relaxation, Creep, Viscoelastic materials, Polymers, Soft tissues, Constitutive models, Elements of stress and strain analysis, Nonlinear effects and Applications.

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

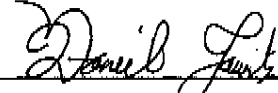
- | | | |
|----|----|----|
| 1) | 2) | 3) |
| 4) | 5) | 6) |

Department Chair: 
(Chair Signature)

Date: 7/19/2012

Discipline Specific Curricula Committee: 
(Chair signature)

Date: 9/4/12

Curricula Committee: 
(Chair Signature)

Date: 9/11/2012