



MISSOURI UNIVERSITY OF SCIENCE AND TECHNOLOGY

Formerly University of Missouri-Rolla

Agenda
Campus Curricula Committee Meeting
October 5, 2011
12 a.m. Room 117 Fulton Hall

Approval of the September 07, 2011 minutes.

Review of submitted DC forms:

DC 0397, Business & Information Technology, Sustainable Business Minor, effective Fall 2012.

Review of submitted CC forms:

CC 8169, GE 482, Surface Waves (MASW) & Ground Penetrating Radar (GPR), effective Spring 2012.

CC 8170, EE 309, Electric-Drive Vehicles, effective Spring 2012.

CC 8171, History 227, History of Japan, effective Fall 2012.

CC 8172, IST 380, Introduction to Web and New Media Studies, effective Spring 2012.

CC 8173, ERP 342, Customer Relationship Management in ERP Environment, effective Spring 2012.

CC 8174, ERP 442, Advanced Customer Relationship Management in ERP Environment, effective Spring 2012.

CC 8175, ML 110, British Life & Culture, effective Spring 2012.

CC 8176, Business 340, Introduction to Business Innovation for Sustainability, effective Spring 2012.

CC 8177, Russian 330, Business Russian, effective Spring 2012.

Review of submitted EC forms:

EC 2350, Ceramic Engineering 301, Formation and Properties of Glass-Ceramics, effective Spring 2012.

EC 2356, Statistics 401, Analysis of Categorical Data, effective Spring 2012.



MISSOURI UNIVERSITY OF SCIENCE AND TECHNOLOGY

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EC 2357, Mining Engineering 301, Diesel Particulate Matters Emissions Control, effective Spring 2012.

EC 2358, IST 401, Information Network Science, effective Spring 2012.

EC 2359, Mechanical Engineering 301, Aerospace Engineering 301, Introduction to Microfluidics, effective Spring 2012.

EC 2360, Civil Engineering 401, Fundamentals of Rheology and Self-Consolidating Concrete, effective Spring 2012.

EC 2367, Civil Engineering 401, Advanced Concrete Science and Technology, effective Fall 2012.

EC 2368, ERP 301, ERP-Enabled Sustainability Management Systems, effective Fall 2012.

EC 2369, Business 301, International Business Ethics, effective Summer 2012.

Tabled Items:

DC 0392, Aerospace Engineering, Bachelor of Science, effective Fall 2011. **Tabled**

EC 2345, Electrical Engineering 301, Autonomous Mobile Robots, effective Spring 2012. **Tabled**

Effective Year: 2012

DC # 0397-2011-BUS-000-00

Effective Term: Summer Fall Spring

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

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:

Minor: Sustainable Business

Department: Business & Information Technology

Briefly describe action requested (Attach documentation as appropriate):

A new Minor in Sustainable Business is proposed, with the following courses:

BUS 110 - Management and Organizational Behavior

BUS 330 - Foundations of Sustainable Business

BUS 315 - Teambuilding and Leadership in a Business Setting

and two courses from the following:

ERP 348 - Strategic Enterprise Management Systems

EnvE 360 - Environmental Law and Regulation

EnvE 365 - Sustainability, Population, Energy, Water, and Materials

Psych 315 - Environmental Psychology

Econ 340 - Environmental and Natural Resources Economics


Econ 355 - Energy Economics

Pol Sci 350 - Politics of the Third World

Hist 361 - American Environmental History

Recommended by Department: 
(Chair signature)

Date: 9/13/11

Recommended by: 
Discipline Specific Curricula Committee (Chair signature)

Date: 9/15/11

Approved by Curricula Committee: _____
(Chair signature)

Date: _____

Approved by Faculty Senate: _____
(Chair signature)

Date: _____

CC File # 8169-2011-GE-482-10

Effective Year: 2012

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: GSE

2. Discipline and Course Number: Present : GE 401 Proposed: GE 482

3. Course Title: Present: Surface Waves (MASW) & Ground Penetrating Radar (GPR)
Proposed: Surface Waves (MASW) & Ground Penetrating Radar (GPR)

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

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

Present:

Proposed: Geological engineering applications of surface wave and ground penetrating radar methods are emphasized. Field data will be acquired, processed and interpreted.

5. If course requires field trip check box:

6. Credit Hours: Present: Lecture: 2 Lab: 1 Total: 3
Proposed: Lecture: 2 Lab: 1 Total: 3

7. Prerequisites: Present: GE 50 or CE 215 or equivalent, and graduate standing

Proposed: GE 50 or CE 215 or equivalent, and graduate standing

8. Required for Majors: Elective for Majors:

9. Justification:

10. Semesters previously offered as an experimental course (101, 201, 301, 401): Spring 2010, 2011

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 _____ Date: 7-22-11
(Chair signature)
Recommended by Discipline Specific Curricula Committee _____ Date: _____
(Chair signature)
Approved by Curricula Committee: _____ Date: _____
(Chair signature)
Approved by Faculty Senate: _____ Date: _____
(Chair signature)

CC File # 8/170-2011-EE-309-10

Effective Year: 2012
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: Electrical & Computer Engr
- 2. Discipline and Course Number: Present : EE 301 Proposed: EE 309
- 3. Course Title: Present: Electric-Drive Vehicles
Proposed: Electric-Drive Vehicles

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

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

Present: Course covers introductory topics related to understanding/analysis of electric, hybrid/plug-in hybrid power trains. Classification of hybrid drivetrains, driving cycles, energy storage systems, mechanical coupling devices, automotove applications of fuel cells & intro to power conveters.

Proposed: Course covers introductory topics related to understanding/analysis of electric, hybrid/plug-in hybrid power trains. Classification of hybrid drivetrains, driving cycles, energy storage systems, mechanical coupling devices, ~~automotove~~ applications of fuel cells & intro to power ~~conveters.~~
converters. *Automotive*

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: Senior Standing
Proposed: Senior Standing

8. Required for Majors: Elective for Majors:

9. Justification: By the introduction of hybrid electric vehicles, drastic changes have taken place in the future outlook of automotive industry. It is of great importance to have a related course in this challenging field to educate the next generation of engineers and foster the research related activities.

10. Semesters previously offered as an experimental course (101, 201, 301, 401): SP 2010 & SP 2011

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	<u><i>John E. ...</i></u> (Chair signature)	Date: <u>14 July 2011</u>
Recommended by Discipline Specific Curricula Committee	_____ (Chair signature)	Date: _____
Approved by Curricula Committee:	_____ (Chair signature)	Date: _____
Approved by Faculty Senate:	_____ (Chair signature)	Date: _____

CC File # 8171-2011-Hist-227

Effective Year: 2012-2013

Term: Summer Fall Spring

Course Change Form (CC)

This form is for creating or modifying permanent courses.

ATTN: ANGIE HUFFMAN 4362

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: History and Political Science Proposed: HIST 227

2. Discipline and Course Number: Present: HIST 301

3. Course Title: Present: History of Japan
Proposed: History of Japan

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

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

Present: This course covers the history of modern Japan from 1600 to the present and includes Japan's political, social, and cultural/intellectual history.

Proposed: SAME AS ABOVE

5. If course requires field trip check box:

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

7. Prerequisites: Present: HIST 111 or HIST 112 or HIST 175 or HIST 176

Proposed: HIST 111 or HIST 112 or HIST 175 or HIST 176

8. Required for Majors: Elective for Majors:

9. Justification: This course brings another history of non-Western nations into the Department of History and Political Science's curriculum adding to the diversity offered by the Department. It also helps students seeking teaching certification to complete their requirements for NON-Western history.

10. Semesters previously offered as an experimental course (101, 201, 301, 401): Sp 2009 & Fall 2011

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 Y. Yang

(Chair signature)

Recommended by Discipline Specific Curricula Committee W. Allen

(Chair signature)

Approved by Curricula Committee: _____

(Chair signature)

Approved by Faculty Senate: _____

(Chair signature)

Date: 8/18/11

Date: 9/12/11

Date: _____

Date: _____

Missouri S&T

HIST 301, Section A History of Japan

Dr. Diana L. Ahmad

Fall 2011

Course Days, Times, & Location: MWF, 9:00-9:50 a.m., H-SS 101

Telephones: Office: 341-4817; Home: 458-2245 (calls accepted between 8 a.m. and 7 p.m.)

Email Address: ahmadd@mst.edu

Office Location and Hours: H-SS 124, MW, 11:00 a.m.-1:00 p.m. and by appointment

Objective

The objective of this course is to introduce the student to the history of Japan. Although the class will begin in the prehistoric era, the emphasis will be on the period after reunification under Tokugawa. Japan's political, social, and cultural/intellectual history will be discussed.

Readings

Allyn, John. *The 47 Ronin Story*. Tokyo: Tuttle Publishing, 1970.

Kuroyanagi, Tetsuko. *Totto-chan: The Little Girl at the Window*. Tokyo: Kodansha International, 1996.

Natsume, Sōseki. *I Am a Cat*. Boston: Tuttle Publishing, 2002.

Walthall, Anne. *Japan: A Cultural, Social, and Political History*. Boston: Houghton Mifflin Company, 2006.

Examinations, Article Summaries, and Grading Policy

The course grade will be based on 3 exams, 1 map quiz, and 4 "mini-essays." The exams are worth 100 points each and the mini-essays and map quiz are worth 50 points each. There are 550 points available in this class. For details about the mini-essays, please see the handout. A map study guide is included in this packet. All assignments are due in class at the start of class on their respective due dates. Late papers will lose 3 points per day, including weekends and holidays. NO extra credit is available unless initiated by me. Make-up exams will be given only with the prior consent of the instructor or upon presentation of an acceptable excuse. Missed exams must be taken within one week of the scheduled date and may be different from the original. Any missing exams, "mini-essays" or the map quiz will receive the grade of "0" or "F."

A = 495-550; B = 440-494; C = 385-439; D = 330-384; F = 0-329 points

Attendance

Class attendance is recommended and expected. If you have a problem attending, please see me.

Cheating, Plagiarism, and Sabotage Policy, Academic Alert System, & Disability Support Services

Please see handout, "Important Information for All S&T Students."

Email

Should I need to contact you during the semester, I will ONLY use your Missouri S&T email account. I will not gather, nor seek, other email addresses from you. Please check your Missouri S&T email account regularly for official university emails.

Tape Recorders, Cell Phones, Text Messaging, and Notebook Computers

No voice or video recordings of any type are permitted of this class. Cell phones must be turned off in class. If a cell phone rings or vibrates during class, I will answer it. No text messaging is permitted in class. If text messaging occurs, the cell phone will be surrendered to me immediately. Computers may not be on the internet or email during class, unless requested by me. If the user checks email or surfs the internet on personal business during class, the computer will be surrendered to me immediately. Generally, the use of cell phones for calling or text messaging will not be tolerated in class. Please turn the phones OFF, not simply to vibrate or silent.

Exam Rules:

No food, no drink, no cell phones, no computers, and no ear phones are permitted during the exams. If a cell phone or computer is visible during an exam or quiz, it will be surrendered to me immediately.

Topics, Exams, and Reading Schedule

August 22	Introduction
August 24	Geography and Early History Reading: Walthall, Chapter 1
August 26, 29, 31	Emergence of the Early Japanese State Reading: Walthall, Chapter 1

September 2	Mini-Essay Session ITEM DUE: Map Quiz (50 points)
September 5	NO SCHOOL—Labor Day
September 7, 9, 12	Heian Aristocrats and Kamakura Warriors Reading: Walthall, Chapter 2, 3
September 14, 16, 19	Ashikaga Feudalism Reading: Walthall, Chapter 4 ITEM DUE: September 16, Mini-Essay #1 (50 points)
September 21, 23, 26	Reunification of Japan Reading: Walthall, Chapter 4
September 28	Martial Arts
September 30; October 3, 5, 7, 10	Tokugawa Japan Reading: Walthall, Chapters 5, 6 ITEM DUE: October 5, Mini-Essay #2 (50 points)
October 12	EXAM I (100 points) Reading: By this date, you should have finished <i>The 47 Ronin</i> .
October 14, 17	NO CLASSES— Dr. Ahmad is at Cambridge University, Great Britain.
October 19, 21, 24, 26	Meiji Restoration Reading: Walthall, Chapter 7
October 28, 31, November 2	Emergence of Modern Japan Reading: Walthall, Chapter 8 ITEM DUE: October 28, Mini-Essay #3 (50 points)
November 4, 7	Creation of a Modern Culture Reading: Walthall, Chapter 8
November 9	EXAM II (100 points) Reading: By this date, you should have finished <i>I Am a Cat</i> .
November 11, 14	Taisho Era
November 16, 18	1930s and Japanese Militarism Reading: Walthall, Chapter 9 ITEM DUE: November 18, Mini-Essay #4 (50 points)
November 21, 23, 25	NO CLASSES— Thanksgiving Break
November 28, 30	World War II Reading: Walthall, Chapter 9
December 2, 5	The Occupation Reading: Walthall, Chapter 9
December 7, 9	New Japan Begins Reading: Walthall, Chapter, 10
TBA	EXAM III (100 points) (date, time, and room TO BE ANNOUNCED) Reading: By this date, you should have finished <i>Totto-chan</i> .

NOTE: The syllabus and assignments are subject to change at the discretion of the professor or as necessary.

Effective Year: 2012

CC File # 8172-2011-IST-380-10

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: Business and Information Tech
2. Discipline and Course Number: Present : Proposed: IST 380

3. Course Title: Present: Proposed: Introduction to Web and New Media Studies

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

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

Proposed: The course covers web culture, including topics such as social media; citizen journalism; crowd intelligence; privacy; and copyright. Students can not receive credit for both this course and IST 480 (Advanced Web Studies).

5. If course requires field trip check box:

6. Credit Hours: Present: Lecture: Lab: Total:
Proposed: Lecture: 3.0 Lab: 0.0 Total: 3.0

7. Prerequisites:
Present:

Proposed: none

8. Required for Majors: Elective for Majors:

9. Justification: Combined 300- and 400- level course; this one (380) for undergraduates, Advanced (480) for graduates. Taught together, with additional assignments for 480 students.

10. Semesters previously offered as an experimental course (101, 201, 301, 401): F 10, F 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 Caroline Fisher Date: 8/30/11
(Chair signature)
Recommended by Discipline Specific Curricula Committee Romy Flachbart Date: 8/30/11
(Chair signature)
Approved by Curricula Committee: _____ Date: _____
(Chair signature)
Approved by Faculty Senate: _____ Date: _____
(Chair signature)

Effective Year: 2012
Term: Summer Fall Spring

CC File # 8173-2011-ERP-342-32

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: Business & Info Tech
- 2. Discipline and Course Number: Present : ERP 342 Proposed:
- 3. Course Title: Present: Customer Relationship Management in ERP Environment
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: Identification (targeting), acquisition, retention, and development (expansion) of (profitable) customers. Effective and efficient management of customers with utilization of information technology. SAP CRM and SAS BI tools are used to enhance student education with real world applications.

Proposed:

5. If course requires field trip check box:

6. Credit Hours:	Present:	Lecture: 3.0	Lab: 0.0	Total: 3.0
	Proposed:	Lecture:	Lab:	Total:

7. Prerequisites:
Present: ERP345 or ERP444 or IST444

Proposed: ERP 246 or ERP 346 (ERP 346 may be taken concurrently)

8. Required for Majors: Elective for Majors:

9. Justification: Refining the prerequisites to more underlying courses.
Note: Students may not receive credit for both ERP 342 and ERP 442.

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 <u>Caroline Justin</u> (Chair signature)	Date: <u>8/30/11</u>
Recommended by Discipline Specific Curricula Committee <u>Bryce Flaherty</u> (Chair signature)	Date: <u>8/30/11</u>
Approved by Curricula Committee: _____ (Chair signature)	Date: _____
Approved by Faculty Senate: _____ (Chair signature)	Date: _____

(Revised 1/29/09)

Effective Year: 2012

CC File # 8174-2011-ERP-442-32

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: Business & Info Tech

2. Discipline and Course Number: Present : ERP 442 Proposed:

3. Course Title: Present: Adv Customer Relationship Management in ERP Environment
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: Identification (targeting), acquisition, retention, and development (expansion) of (profitable) customers. Effective and efficient management of customers using IT. SAP CRM and SAS BI tools used to enhance student education with real world applications. Research paper & presentation required.

Proposed:

5. If course requires field trip check box:

6. Credit Hours: Present: Lecture: 3.0 Lab: 0.0 Total: 3.0
Proposed: Lecture: Lab: Total:

7. Prerequisites:

Present: ERP345 or ERP444 or IST444

Proposed: ERP 246 or ERP 346 (ERP 346 may be taken concurrently)

8. Required for Majors: Elective for Majors:

9. Justification: Refined prerequisites to more underlying courses.
Note: Students may not receive credit for both ERP 342 and ERP 442.

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 Caroline Fisher Date: 8/30/11
(Chair signature)
Recommended by Discipline Specific Curricula Committee Rory MacLachlan Date: 8/30/11
(Chair signature)
Approved by Curricula Committee: _____ Date: _____
(Chair signature)
Approved by Faculty Senate: _____ Date: _____
(Chair signature)

Effective Year: 2012

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: English & Technical Communication
2. Discipline and Course Number: Present: 110 ML Proposed:
3. Course Title: Present: British Life & culture Proposed: Understanding Modern Britain
Abbreviated Course Title: Modern Britain
(24 Spaces or Less. Only needed for New Courses or Title Changes.)
4. Catalog Description (300 Character Spaces or Less.)
Present:

Proposed:

5. If course requires field trip check box:

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

7. Prerequisites:
Present: None

Proposed:

8. Required for Majors: Elective for Majors:

9. Justification: Course title change has been approved by the Missouri London Program Board of Directors.

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)

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

Approved by Curricula Committee: _____
(Chair signature)

Approved by Faculty Senate: _____
(Chair signature)

Date: 8/25/11
Date: 9/12/11
Date: _____
Date: _____

New course description

Kellems, Susan Lynn

Understanding Modern Britain

This course offers students the opportunity to become familiar with a range of aspects of contemporary Britain through which they can understand the diverse nature of this country's society. Students will explore areas of British life including entertainment, sport, politics, religion and social problems. By the conclusion of the course students will have gained a good knowledge and understanding of contemporary British life and culture.

Old course description

Kellems, Susan Lynn

From: Huffman, Angie L.
Sent: Wednesday, October 20, 2010 11:35 AM
To: Kellems, Susan Lynn

ML 110 description. British Life and Culture

A seminar on British civilization covering a variety of subjects such as the monarchy; the British economic health, and educational systems; art and architecture in London; the British judicial and political systems; and the British class structure and welfare state.

Understanding

general humanities credit

withheld

Effective Year: 2012
Term: Summer Fall Spring

CC File # 8176-2011-BUS-340-10

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: Business and Information Tech
2. Discipline and Course Number: Present : Proposed: BUS 340
3. Course Title: Present: Proposed: Introduction to Business Innovation for Sustainability

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

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

Proposed: This course introduces a platform for students to focus on a variety of environmental sustainability issues and culminates in a business proposal for an ethical, sustainable, and profitable venture for a new or existing business, non-profit, or governmental organization.

5. If course requires field trip check box:

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

7. Prerequisites:
Present:

Proposed: BUS 330 or equivalent

8. Required for Majors: Elective for Majors:

9. Justification: BUS 440 is part of the Grad certificate in Sustainable Business. This creates BUS 340, with much of the same content, but at an undergraduate level.

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 Caroline Fisher Date: 9/13/11
(Chair signature)
Recommended by Discipline Specific Curricula Committee Dany Alshohet Date: 9/15/11
(Chair signature)
Approved by Curricula Committee: _____ Date: _____
(Chair signature)
Approved by Faculty Senate: _____ Date: _____
(Chair signature)

Effective Year: 2012

CC File # 8177-2011-Russ-330-10

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: ALP
2. Discipline and Course Number: Present : 301 Proposed: 330 RUSSIAN

3. Course Title: Present: Business Russian
Proposed: Business Russian

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

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

Present: The course addresses practical language skills and strategies for conducting business in Russian-speaking countries. Students will improve their knowledge of contemporary Russian culture and business etiquette. Readings, lectures, and discussions are in Russian. Lab work is required weekly.
Proposed: The course addresses practical language skills and strategies for conducting business in Russian-speaking countries. Students will improve their knowledge of contemporary Russian culture and business etiquette. Readings, lectures, and discussions are in Russian. Lab work is required weekly.

5. If course requires field trip check box:

6. Credit Hours: Present: Lecture: 2 Lab: 1 Total: 3
Proposed: Lecture: 2 Lab: 1 Total: 3

7. Prerequisites:
Present: Russ 80
Proposed: Russ 80

8. Required for Majors: Elective for Majors:

9. Justification:

10. Semesters previously offered as an experimental course (101, 201, 301, 401): Sp 2009, FS 2011

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: 7/8/2011

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

Date: 9/12/2011

Approved by Curricula Committee: _____
(Chair signature)

Date: _____

Approved by Faculty Senate: _____
(Chair signature)

Date: _____

EC File # 2350-5p 2012-Cer 301

Effective Year: 2012
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: Materials Science & Engineerin

Discipline and Course Number: Cer 301

Course Title: Formation and Properties of Glass-ceramics

Abbreviated Title (24 spaces or less): Glass-ceramics

Instructor(s): Kathryn Goetschius

Credit Hours: Lecture: 3.0 Lab: 0.00 Total: 0.00

Prerequisites: Cer 103 "Introduction to Glass Science & Technology", graduate standing or permission from instructor.

Semester(s) previously taught: none

Brief Course Description: (40 words or less)

This course will cover the formation and properties of glass-ceramics, including many common systems. Nucleation and growth of crystalline phases from glass forming melts will be described and the design of specific engineering properties due to crystallization will be emphasized.

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: Walter Huch
(Chair Signature)

Date: 7/5/11

Discipline Specific Curricula Committee: _____
(Chair signature)

Date: _____

Curricula Committee: _____
(Chair Signature)

Date: _____

CER 301

Formation and Properties of Glass-Ceramics

Spring 2012

Lecture:

To be determined

Instructor:

Kathryn Goetschius
GAANN Fellow
Department of Material Science and Engineering
Office: 140 McNutt Hall
Phone: 573.341.6131
Email: klgyvb@mst.edu

Office Hours:

To be determined

Course Description:

This course will cover the formation and properties of glass-ceramics, including many common systems. Nucleation and growth of crystalline phases from glass forming melts will be described and the design of specific engineering properties due to crystallization will be emphasized.

Textbooks: These are not required but may be useful.

James Shelby, Introduction to Glass Science, (Royal Society of Chemistry, 2005).

M. H. Lewis ed., Glasses and Glass-Ceramics, (Chapman and Hall, 1989).

Wolfram Höland and George Beall, Glass-Ceramic Technology, (American Ceramic Society, Westerville, OH 2002).

Course Prerequisites:

CER 103 "Introduction to Glass Science and Technology," graduate standing or permission from the instructor

Grading:

3 exams (100 points each)	300 points
Homework and Quizzes	300 points
Attendance/Participation	100 points
Presentation on paper	100 points
Semester Project	200 points

Tentative Course Topics

- Nucleation and Growth (thermo and kinetics)
- TTT curves and critical cooling rate
 - DTA measurement
- Surface vs bulk crystallization
- Heterogeneous vs homogeneous nucleation
- Nucleation agents and epitaxial growth
- Diffusion of atoms in glass
- Crystalline phase(s) and residual glass
- Active vs passive crystalline phase
- Composite behavior
 - Connectivity of phases
 - Mixing rules for properties
- Optical, Elec., Mech., Thermal, Chem., Mag. Properties
- Different commercial glass-ceramic compositions

Tentative Semester Project

Design a glass ceramic system to meet a specific need. Take into consideration the type of crystallization, the nucleating agent, the crystal formed and the composition of the residual glass. Discuss a potential heat treatment schedule and give an idea of the properties of the resulting composite. Outline an experimental plan to determine the viability of this system.

EC File # 2356-Sp2012-Stat-401

Effective Year: 2012
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: Mathematics and Statistics

Discipline and Course Number: Stat 401

Course Title: Analysis of Categorical Data

Abbreviated Title (24 spaces or less): Categorical Data

Instructor(s): Meggle Wen

Credit Hours: Lecture: 3 Lab: Total: 3

Prerequisites: Stat 343 and 344 and one of Stat 346, 444 or 453

Semester(s) previously taught: None

Brief Course Description: (40 words or less)

A graduate-level introduction to statistical methods for analyzing categorical data will be provided. Contingency tables, generalized linear models including logistic regression models, log-linear models, ordinal and nominal regression models, Poisson regression will be discussed.

AND 5

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: *Loren Hall* (Chair Signature)

Date: 8/9/2011

Discipline Specific Curricula Committee: *Daniel Smith* (Chair signature)

Date: 9/7/2011

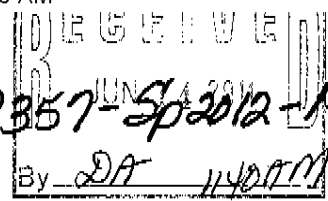
Curricula Committee: _____ (Chair Signature)

Date: _____

Sp 2012

Effective Year: ~~2011~~
Effective Term: Summer Fall Spring

EC File # 2857-SP2012-MIN-301
By DA 11/4/11



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: Mining and Nuclear Engineering

Discipline and Course Number: MIN 301

Course Title: Diesel Particulate Matters Emissions Control

Abbreviated Title (24 spaces or less): DPM Emission Control

Instructor(s): Jerry Tien

Credit Hours: Lecture: 3.0 Lab: Total:

Prerequisites: MIN 318 and MIN 324

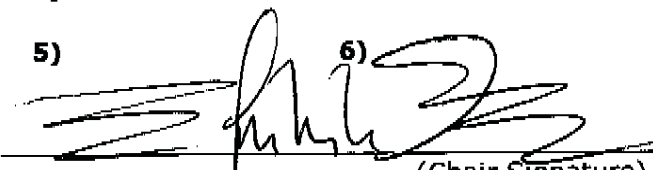
Semester(s) previously taught: FS 2010

Brief Course Description: (40 words or less)

Introductory of basic diesel particulate matters (DPM) occurrence in underground mines; health effects and control strategies; DPM regulations for both coal and non coal operations; cost of DPM control on mining operations.

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: 06/13/11

Discipline Specific Curricula Committee: _____
(Chair signature)

Date: _____

Curricula Committee: _____
(Chair Signature)

Date: _____

Effective Year: 2012
Effective Term: Summer Fall Spring

EC File # 2358-Sp2012-IST-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: Business & Info Tech

Discipline and Course Number: IST 401

Course Title: Information Network Science

Abbreviated Title (24 spaces or less): Info Network Science

Instructor(s): Hilgers

Credit Hours: Lecture: 3.0 Lab: Total: 3.0

Prerequisites: Calculus and Statistics

Semester(s) previously taught: N/A

Brief Course Description: (40 words or less)

Information networks are massive and complex, but contain amazing coherence. This course examines questions of the structure and evolution of information networks. Graph and random graph theory are introduced. Real-world applications such as search engines are considered.

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: Carolyn Lusk (Chair Signature) Date: 8/30/11

Discipline Specific Curricula Committee: Ray Heckst (Chair signature) Date: 8/30/11

Curricula Committee: _____ (Chair Signature) Date: _____

EC File # 2359-Sp2012-ME-301

Effective Year: 2012
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: Mechanical & Aerospace Eng.

Discipline and Course Number: Mc Eng 301

Course Title: Introduction to Microfluidics

Abbreviated Title (24 spaces or less): Intro to Microfluidics

Instructor(s): K. M. Isaac

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

Prerequisites: Math 22, Phys 24 or equivalent, at least Junior standing

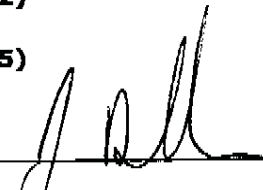
Semester(s) previously taught: 0

Brief Course Description: (40 words or less)

An overview of interdisciplinary microfluidics covering special features of flow and mass transfer in microscale systems. CAD and analyses packages will be used to design and analyze microfluidic systems. Topics will include fabrication, system integration and large scale manufacturing.

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

- 1) AeEng301 2) 3)
- 4) 5) 6)

Department Chair: 
(Chair Signature)

Date: 8/19/2011

Discipline Specific Curricula Committee: _____
(Chair signature)

Date: _____

Curricula Committee: _____
(Chair Signature)

Date: _____

Effective Year: 2012

Effective Term: Summer Fall Spring

EC File # 2360-Sp 2012-CE-401

Experimental Course Form (EC)

This form must be filed with the Secretary to the Campus Curricula Committee, after the department chair's notation, by the appropriate deadline. Filing deadlines for inclusion in the initial release of the Schedule of Classes are as follows:

Summer and Fall Semester Offerings – January 1
Spring Semester Offerings – August 1

An EC form must be submitted each semester it is to be offered, not to exceed two offerings. An experimental course that is required should be submitted on a CC form. Co-listed offerings should be submitted on one form, originating from the primary discipline.

Department: Civil, Architectural and Environmental Engineering

Discipline and Course Number: CE 401

Course Title: FUNDAMENTALS OF RHEOLOGY AND SELF-CONSOLIDATING CONCRETE

Abbreviated Title (24 spaces or less): Concrete Rheology & SCC

Instructor(s): Prof. Kamal H. Khayat

Credit Hours: **Lecture:** 3 **Lab:** **Total:**

Prerequisites: Consent of Instructor with Graduate Standing

Semester(s) previously taught: Not Applicable

Brief Course Description: (40 words or less)

Discuss various rheological testing protocols and models applicable to cement-based materials and present relationships between rheological parameters and workability of grout and concrete. Understand the effect of rheology on key performance characteristics of specialty concretes, including self-consolidating concrete (SCC), underwater concrete, pumped concrete, and shotcrete. Examine mix design approach, placement considerations, engineering properties, and durability of SCC targeted for prestressed/precast and cast-in-place 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: Date: 8/29/11
(Chair Signature)

Discipline Specific Curricula Committee: _____ Date: _____
(Chair signature)

Curricula Committee: _____ Date: _____
(Chair Signature)

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EXPERIMENTAL COURSE**CE 401 – FUNDAMENTALS OF RHEOLOGY AND SELF-CONSOLIDATING CONCRETE****Course description and objectives**

Develop vocabulary describing rheology of non-Newtonian fluids. Appreciate various rheological testing protocols and relationship between rheological parameters and workability aspects of cement-based materials. Understand the effect of rheology on key performance characteristics of specialty concretes, including self-consolidating concrete (SCC), underwater concrete, pumped concrete, and shotcrete. Examine mix design approach, placement considerations, engineering properties, and durability of SCC targeted for prestressed/precast and cast-in-place applications.

Topics coveredPart I - Rheology

- Introduction to rheology: terminology and significance
- Rheology: the science behind workability
- Shearing models for cement-based materials
- Viscometric methods and measurement
- Newtonian and non-Newtonian liquids and time dependent (thixotropic materials)
- Testing protocols of rheology and data interpretation (torque and shear stresses)
- Comparison of test results of various concrete rheometers
- Shear thinning and shear thickening
- Thixotropy (Hattori-Izumi theory, thixotropy and shear history)
- Effect of thixotropy on concrete performance (stability, form pressure, distinct layer casting, ...)
- Effect of chemical admixtures on rheology of cement-based materials (superplasticizers and viscosity-enhancing admixtures)
- Effect of constituent materials (cement, supplementary cementitious materials and fillers and aggregate), mix design, temperature, and elapsed time on rheology of cement-based materials
- Concrete-equivalent mortar approach for mix design
- Rheology of speciality concretes: underwater concrete, pumped concrete, shotcrete, etc.

Part II – SCC technology

- Anticipated benefits of SCC in various industries
- Q/C test methods and acceptance criteria for SCC (filling ability, passing ability, static and dynamic stability, ...)
- Material selection considerations (cements and blended cements, aggregates, supplementary cementitious materials, fillers, and chemical admixtures)
- Mix design of SCC

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- Production and placement considerations (mixing, production and delivery, placement, Q/C, etc.)
 - Robustness
 - Formwork pressure considerations
 - Mechanical properties
 - Creep and shrinkage
 - Transport properties
 - Durability (frost, corrosion, sulphate attack, etc.)
 - Structural performance (flexure, compression, shear, bond, etc.)
 - Self-consolidating, fiber-reinforced concrete and mortar
 - Lightweight SCC
 - Eco-Crete
 - Repair mortar and concrete
 - Case studies

Effective Year: 2012
Effective Term: Summer Fall Spring

EC File # 2367-FS2012-CE-401

Experimental Course Form (EC)

This form must be filed with the Secretary to the Campus Curricula Committee, after the department chair's notation, by the appropriate deadline. Filing deadlines for inclusion in the initial release of the Schedule of Classes are as follows:

Summer and Fall Semester Offerings – January 1
Spring Semester Offerings – August 1

An EC form must be submitted each semester it is to be offered, not to exceed two offerings. An experimental course that is required should be submitted on a CC form. Co-listed offerings should be submitted on one form, originating from the primary discipline.

Department: Civil, Architectural and Environmental Engineering

Discipline and Course Number: CE 401

Course Title: ADVANCED CONCRETE SCIENCE AND TECHNOLOGY

Abbreviated Title (24 spaces or less): Advanced Concrete Tech

Instructor(s): Prof. Kamal H. Khayat

Credit Hours: Lecture: 3 Lab: Total:

Prerequisites: Consent of Instructor with Graduate Standing

Semester(s) previously taught: Not Applicable

Brief Course Description: (40 words or less)

Understand relationships between microstructure and macro-scale behavior of cemen-based materials. Master various types of chemical admixtures and binder systems used in high-performance concrete. Discuss key engineering properties affecting behavior of structures, including mechanical properties, fatigue, toughness, dimensional stability, and thermal properties. Master different types of physical and chemical factors leading to concrete deterioration and mitigation.

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: _____ Date: 8/29/11
 (Chair Signature)

Discipline Specific Curricula Committee: _____ Date: _____
 (Chair signature)

Curricula Committee: _____ Date: _____
 (Chair Signature)

EXPERIMENTAL COURSE

CE 401 - ADVANCED CONCRETE SCIENCE AND TECHNOLOGY

Course description and objectives

Develop vocabulary describing the structure, properties, and behavior of cement-based materials. Understand relationships between microstructure and macro-scale material behavior (mechanical properties and durability). Master various techniques to evaluate workability and rheology of cement-based materials and the influence of plastic properties on strength and durability. Build awareness of material strength, durability, and cost to promote effective material selection, material design, and structural design. Develop intuitive sense of material behavior, chemical and mineral admixture selection, and design of specialty concrete and through a series of laboratory experiments.

Topics covered

- Fabrication and composition of Portland cement
- Chemical composition of Portland cement
- Hydration kinetics and products of cement hydration (silicates and aluminate phases)
- Structure of hydrated cement paste and volume changes of hydration products
- Microstructure development of concrete
- Rheology of cement-based materials (models and measurement techniques)
- Effect of material properties and mix design parameters on rheology of concrete
- Concrete workability and assessment
- Early-age properties (setting, plastic shrinkage cracking, and form pressure development)
- Mechanical behaviour of concrete (axial, biaxial, and triaxial compressive strength, tensile and flexural strength, shear strength, impact resistance, and bond strength)
- Elastic modulus and Poisson coefficient
- Fiber-reinforced concrete
- Fracture toughness and impact resistance
- Fatigue
- Thermal properties
- Control of thermal stresses
- Creep and stress relaxation
- Autogeneous and drying shrinkage
- Chemical admixtures in concrete: mode of action and effect on concrete performance (water-reducing admixtures, superplasticizer, viscosity-enhancing admixtures, air-entraining admixtures, shrinkage-reducing admixtures, and corrosion inhibitors)
- Supplementary cementitious materials: classifications and effect on concrete performance (fly ash, silica fume, and blast furnace slag)
- Sustainability in concrete construction
- Hot weather concreting
- Cold weather concreting
- Frost durability
- De-icing salt scaling
- Carbonation and corrosion of reinforcing steel
- Sulphate attack
- Alkali-aggregate reaction

Effective Year: 2012
 Effective Term: Summer Fall Spring

EC File # 2368-FS2012-ERP-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: Business & Information Technol

Discipline and Course Number: ERP 301

Course Title: ERP-Enabled Sustainability Management Systems

Abbreviated Title (24 spaces or less): Sustainability Mgt Sys

Instructor(s): Bih-Ru Lea

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

Prerequisites: IST 50

Semester(s) previously taught:

Brief Course Description: (40 words or less)

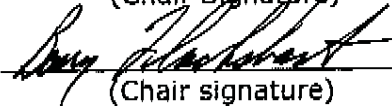
The course addresses how sustainability management systems can be used to reduce compliance costs and business risks and to establish Green IT practices. SAP's EHS Management, Sustainability Analytics, Carbon impact, or similar are used to enhance learning experience.

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: 9/13/11

Discipline Specific Curricula Committee: 
 (Chair signature)

Date: 9/15/11

Curricula Committee: _____
 (Chair Signature)

Date: _____

Effective Year: 2012
Effective Term: Summer Fall Spring

EC File # 2369-SS2012-BUS-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: Business & Info Tech

Discipline and Course Number: BUS 301

Course Title: International Business Ethics

Abbreviated Title (24 spaces or less): International Bus Ethics

Instructor(s): Bonnie Bachman

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

Prerequisites: Bus 110 or BUS 375 or Phil 235.

Semester(s) previously taught:

Brief Course Description: (40 words or less)

Focuses on the international dimension of business ethics including corporate responsibility in economic, social, and environmental terms. It addresses the ethical challenges of international business as part of corporate decision making, corporate citizenship, stakeholder engagement, partnerships, and governance at micro- (personal), meso- (organization), and macro- (system) levels.

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: *Caroline Fisher*
(Chair Signature)

Date: 9/13/11

Discipline Specific Curricula Committee: *Bonnie Bachman*
(Chair signature)

Date: 9/15/11

Curricula Committee: _____
(Chair Signature)

Date: _____

Effective Year: ²⁰¹²~~2011~~
Effective Term: Summer Fall Spring
(Creating or modifying a degree program must be effective for a Fall term)

DC # 0392-2011-AE-000-00

Tabled

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:
Aerospace Engineering - *BS*

Department: Mechanical and Aerospace Engineering

Briefly describe action requested (Attach documentation as appropriate):
Remove the requirement of taking the Fundamentals of Engineering Examination prior to graduation. This requirement has been replaced by a departmental Exit Exam that all graduating seniors must take prior to their graduation. The purpose of this exam is to assess and evaluate the degree to which the undergraduate Aerospace Engineering Program outcomes are being achieved by students upon their graduation.

*Need to know what
Need letter from the Provost*

*Received form
on 5-6-2011*

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

Date: 3/8/2011

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

Date: 7/18/11

Approved by Curricula Committee: _____
(Chair signature)

Date: _____

Approved by Faculty Senate: _____
(Chair signature)

Date: _____

EC File # 2345-SP2012-EE-301

Effective Year: **2012**
Effective Term: Summer Fall Spring

Dabled

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: Elec and Computer Engineering

Discipline and Course Number: EE 301

Course Title: Autonomous Mobile Robots

Abbreviated Title (24 spaces or less): Auto Mobile Robots

Instructor(s): Travis Dierks

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

Prerequisites: EE 231 or equivalent and Stat 217 or equivalent, or consent of instructor

Semester(s) previously taught: 0

Brief Course Description: (40 words or less)

This course will provide an introduction to mobile robots and current approaches to robot autonomy. Topics include mobile robot systems, modeling and control, sensors and estimation, localization and mapping, and motion planning.

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: *Kevin Emlin*
(Chair Signature)

Date: 15 June 2011

Discipline Specific Curricula Committee: *Steve Watkins*
(Chair signature)

Date: 7/18/11

Curricula Committee: _____
(Chair Signature)

Date: _____