MISSOURI S&T

MISSOURI UNIVERSITY OF SCIENCE AND TECHNOLOGY

Formerly University of Missouri-Rolla

Agenda
Campus Curricula Committee Meeting
December 1, 2009 Meeting
3:15 p.m. Room 117 Fulton Hall

Approval of November 6, 2009 minutes.

Review of submitted DC forms:
DC 0340, Environmental Engineering, Bachelor of Science, effective Fall 2010.

DC 0341, Biological Sciences, Bachelor of Arts, effective Spring 2010

DC 0342, Biological Sciences, Bachelor of Arts, Pre-Medicine Emphasis Area, effective Spring 2010.

DC 0343, Biological Sciences, Bachelor of Arts, Secondary Education Emphasis Area, effective Spring 2010.

DC 0344, Biological Sciences, Bachelor of Science, effective Spring 2010.

Review of submitted CC forms:
CC 7845, Electrical Engineering 405, Power System Protection, effective Fall 2010.

CC 7846, Electrical Engineering 404, Economic Operation of Power systems, effective Fall 2010.

CC 7847, Petroleum Engineering 406, Advanced Reservoir Simulation, effective Spring 2010.

CC 7848, Geological Engineering 235, Environmental Geoscience, effective Spring 2010.

CC 7849, Geological Engineering 340, Fld Opr/Ground Water Hyd, effective Spring 2010.

CC 7850, Geological Engineering 349, Comp Appl in Geol Engr, effective Spring 2010.

CC 7851, Geological Engineering 351, Geological Eng Case Hist, effective Spring 2010.

CC 7852, Geological Engineering 415, Advanced Geostatistics, effective Spring 2010.

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CC 7853, Geological Engineering 438, Rem Eng Uncont Haz Waste, effective Spring 2010.

CC 7854, Engineering Graphics 212, Computer Aided Drafting, effective Spring 2010.

CC 7855, Engineering Management 357, Advanced Facilities Planning & Design, effective Spring 2010.

CC 7858, IST 368, Law and Ethics in E- Commerce, effective Fall 2010.

CC 7859, Business 110, Management and Organizational Behavior, effective Fall 2010.

CC 7860, Business 120, Financial Accounting, effective Fall 2010.

CC 7861, Business 320, Managerial Accounting, effective Fall 2010.

CC 7862, Business 360, Business Operations, effective Fall 2010.

CC 7863, Business 380, Strategic Management, effective Fall 2010.

CC 7864, ERP 246, Introduction to Enterprise Resource Planning, effective Fall 2010.

CC 7865, Finance 250, Corporate Finance I, effective Fall 2010.

CC 7866, IST 223, Database Management, effective Fall 2010.

CC 7867, IST 241, E-Commerce, effective Fall 2010.

CC 7868, IST 354, Multi-Media Development and Design, effective Fall 2010.

CC 7870, Engineering Mechanics 324, Engr Plasticity I, effective Spring 2010.

CC 7871, Engineering Mechanics 424, Engr Plasticity II, effective Spring 2010.

CC 7872, Aerospace Engineering 321, Aerodynamics Cad Design, effective Spring 2010.

CC 7873, Aerospace Engineering 341, Exper Stress Analysis I, effective Spring 2010.

CC 7874, Aerospace Engineering 487, Mechanical Engineering 487, Finite Elem Approx III, effective Spring 2010.

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CC 7875, Mechanical Engineering 337, Atmospheric Science, effective Spring 2010.

CC 7876, Mechanical Engineering 341, Experimntl Stress Analysis I, Spring 2010.

CC 7877, Mechanical Engineering 345, Non-Intrusive Meas Meth, effective Spring 2010.

CC 7878, Mechanical Engineering 424, Theory of Stability II, effective Spring 2010.

CC 7879, Biological Sciences 315, Developmental Biology, effective Spring 2010.

CC 7880, Biological Sciences 345, Comparative Chordate Anatomy, effective Spring 2010.

CC 7881, Ceramic Engineering 407, Bhvr-Mtls Vi-Mechanical, effective Spring 2010.

CC 7882, Metallurgical Engineering 351, Min proc II Flo & Hydro, effective Spring 2010.

CC 7883, Metallurgical Engineering 455, Chemical Metallurgy, effective Spring 2010.

CC 7884, Civil Engineering 432, Turbince-Opn Chnnel flow, effective Spring 2010.

CC 7885, Civil Engineering 466, Wastewater Treatment II, effective Spring 2010.

CC 7886, Civil Engineering 491, Internship, effective Spring 2010.

CC 7887, Civil Engineering 499, Case Studies in Civ Engr, effective Spring 2010.

Review of submitted EC forms:
EC 2210, Mining Engineering 401, Geostatistics, effective Spring 2011.

EC 2211, Petroleum Engineering 301, effective Fall 2010.

EC 2212, Petroleum Engineering 401, Advanced Well Completion Design, effective Spring 2010.

EC 2214, Civil Engineering 301, Concrete Pavement Design, effective Spring 2010.

EC 2215, Civil Engineering 301, Structural Dynamics, effective Spring 2010.

EC 2216, Civil Engineering 401, Special Concretes, effective Spring 2010.

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EC 2219, Engineering Management 301, New Product Design, effective Spring 2010.

EC 2220, Nuclear Engineering 401, Electrical Engineering 401, effective Spring 2010.

EC 2222, Aerospace Engineering 301, Mechanical Engineering 301, Plasma Physics I, effective Spring 2010.

EC 2223, Biological Sciences 401, Advanced Nanobiotechnology, effective Spring 2010.

EC 2224, Technical Communication 401, Web-Based Communication, effective Spring 2010.

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DC #0340-2009-EnvEng-000-00

Effective Year: FS 2010
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:
Bachelor of Science in Environmental Engineering

Department: Civil, Architectural and Environmental Engineering

Briefly describe action requested (Attach documentation as appropriate):
This change resulted from review of assessment data. Revised curricula and flow chart are attached, no CC forms are required as no changes to classes are involved.

Summary of Changes.
1) Add IDE 110, 120 and 150
2) Drop both Free electives to balance hours with IDE 110, 120, and 150 addition.
3) Replace IDE 140 with IDE 50. Reason: Statics and Dynamics, IDE 110 and IDE 150, require IDE 50 (Statitcs)
4) Add CE 215 as a technical elective.
5) Drop ME 227 towards thermodynamics requirement, now requiring only ChE 141. Previous requirement was ME 227 or ChE 141; no change to total hours.
6) Add ChE 237 as a depth elective.

Recommended by Department: _____ (Chair signature) Date: 9/28/09

Recommended by Discipline Specific Curricula Committee: _____ (Chair signature) Date: 10-19-09

Approved by Curricula Committee: _____ (Chair signature) Date: _____

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

(Revised 1/31/2008)

09/28/09

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Environmental Engineering Bachelor of Science

Current

FRESHMAN YEAR

First Semester	Credit
FE 10-Study & Careers in Eng[2]	1
Chem 1,2-Gen Chem	5
Math 14-Calculus for Engineers I	4
English 20-Expos & Argumentation	3
General Education Elective[1]	3
	16

Second Semester	Credit
IDE 20-Eng Design w/Cmp Apps	3
Math 15-Calculus for Engineers II	4
Phy 23-Engineering Physics I	4
General Education Elective[1]	6
	17

SOPHMORE YEAR

First Semester	Credit
~~**IDE 140-Statics & Dynamics**~~	~~3~~
Math 22-Calculus w/Analytic Geo III	4
EnvE 261-Intro to Env Engr & Sci[3]	3
Chem 3 or Geo 275-Geochemistry	3
Bio Sc 110-General Biology	3
	16

Second Semester	Credit
ChE 120-Chem Eng Mat Bal	3
EnvE 262-Env Eng Bio Fund	3
CE 230-Elem Fluid Mech[2]	3
Phys 24-Engineering Physics II	4
Math 204-Elem Diff Equations	3
	16

JUNIOR YEAR

First Semester	Credit
EnvE 265-Water & Wastewater Eng[3]	3
EnvE 263-Env Eng Chem Fund	3
Stat 213-Applied Eng Stat	3
GE 50-Geology for Engineers	3
Communications Elective[6]	3
	15

Second Semester	Credit
EnvE Depth Elective[4,5]	3
EnvE 369-Sanitary Design	3
CE 234-Hydraulic Eng	4
ChE 141 ~~**or ME 227-Thermal Analysis**~~	3
General Education Elective[1]	3
	16

SENIOR YEAR

First Semester	Credit
CE 248-Contracts & Construc Eng	3
EnvE 210-Senior Seminar[3]	1
EnvE Air Pollution Elective[4,7]	3
EnvE Technical Elective[5,8]	3
Hist 270-History of Technology	3
~~**Free Elective.**~~	~~3~~
	16

Second Semester	Credit
EnvE 298-CE Design Project[3]	3
EnvE Depth Elective[4,5]	3
EnvE Depth Elective[4,5]	3
EnvE Technical Elective[5,8]	3
EnvE 269-Research in Env Eng	1
~~**Free Elective.**~~	~~3~~
	16

Proposed

FRESHMAN YEAR

First Semester	Credit
FE 10-Study & Careers in Eng[2]	1
Chem 1,2-Gen Chem	5
Math 14-Calculus for Engineers I	4
English 20-Expos & Argumentation	3
General Education Elective[1]	3
	16

Second Semester	Credit
IDE 20-Eng Design w/Cmp Apps	3
Math 15-Calculus for Engineers II	4
Phy 23-Engineering Physics I	4
General Education Elective[1]	6
	17

SOPHMORE YEAR

First Semester	Credit
IDE 50-Statics	**3**
Math 22-Calculus w/Analytic Geo III	4
EnvE 261-Intro to Env Engr & Sci[3]	3
Chem 3 or Geo 275-Geochemistry	3
Bio Sc 110-General Biology	3
	16

Second Semester	Credit
IDE 110 Mechanics of Materials	**3**
IDE 120 Materials Testing	**1**
IDE 150 Dynamics	**2**
ChE 120-Chem Eng Mat Bal	3
EnvE 262-Env Eng Bio Fund	3
Phys 24-Engineering Physics II	4
	16

JUNIOR YEAR

First Semester	Credit
EnvE 265-Water & Wastewater Eng[3]	3
EnvE 263-Env Eng Chem Fund	3
CE 230-Elem Fluid Mech[2]	3
Math 204-Elem Diff Equations	3
GE 50-Geology for Engineers	3
	15

Second Semester	Credit
EnvE 369-Sanitary Design	3
Stat 213-Applied Eng Stat	3
ChE 141 Thermodynamics	3
EnvE Technical Elective[5,8]	3
Communications Elective[6]	3
	15

SENIOR YEAR

First Semester	Credit
CE 248-Contracts & Construc Eng	3
EnvE 210-Senior Seminar[3]	1
CE 234-Hydraulic Eng	4
EnvE Air Pollution Elective[4,7]	3
Hist 270-History of Technology	3
EnvE Depth Elective[4,5]	3
	16

Second Semester	Credit
EnvE 298-CE Design Project[3]	3
EnvE Depth Elective[4,5]	3
EnvE Depth Elective[4,5]	3
EnvE Technical Elective[5,8]	3
EnvE 269-Research in Env Eng	1
General Education Elective[1]	3
	16

In **red:** IDE 140 is dropped and replaced with IDE 50, 110, 120, and 150. The six added hours are balanced by free electives.

DC #0341-2009-BioSci-000-00

Effective Year: 2010
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:
Bachelor of Arts, Biological Sciences

Department: Biological Sciences

Briefly describe action requested (Attach documentation as appropriate):
We are updating our curriculum to reflect the change in credit hours for organic chemistry classes that are required for our students. These classes (Chem 221 and Chem 223) recently changed from 3 to 4 credit hours each.

We are also including another option for the Computer Science/Statistics requirement for this degree. We now give students the option to take Comp Sci 074 and 078 rather than Comp Sci 053.

Finally, we are editing the last section of the degree requirements to state (more generally) that enough electives are required to obtain a total of 120 credit hours. This is a change in wording (to be simpler), rather than a real change in requirements

Please note the minor changes (in red) on the following page.

Recommended by Department: _____ (Chair signature) Date: 10/11/09

Recommended by: Discipline Specific Curricula Committee _____ (Chair signature) Date: 10/3/2009

Approved by Curricula Committee: _____ (Chair signature) Date: _____

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

(Revised 1/31/2008)

10/08/09

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Bachelor of Arts
Biological Sciences
Degree Requirements

Specific requirements for the B.A. degree in biological sciences include a minimum of 120 semester hours of credit, including 30 hours of biology core courses.

Core Courses Credit
Bio Sc 102-Intro to Bio Sc 1
Bio Sc 110-Gen Bio or Bio Sc 111-Princ Bio 3
Bio Sc 112-Gen Bio Lab 2
Bio Sc 113-Biodiversity 3
Bio Sc 114-Biodiversity Lab 1
Bio Sc 211-Cell Biology 3
Bio Sc 212-Cell Biology Lab 1
Bio Sc 231-Gen Genetics 3
Bio Sc 251-Ecology 3
Bio Sc 310-Seminar 1
Advanced courses, 200 level or higher (at least one with laboratory and one 300 level) 9

Chemistry
Chem 1,2,3, & 4-General Chem 9
Chem 221 & 223-Org Chem 8

Mathematics & Physical Science
Various courses in mathematics, physics, and/or geology chosen in consultation with academic adviser. (Note: Proficiency in College Algebra must be demonstrated by a grade of "C" or better in a College Algebra course or by examination. 9

Computer Science/Statistics (One of the following)
Cmp Sc 053 or 074/078 3
Stat 115-Stat for Soc Sci 3
Stat 211-Stat Tools for Decision Making 3

General Requirements for BA
English Composition (English 20 and one additional composition course) 6
Western Civilizations (History 111 and 112) 6
Foreign Language (three semesters of a foreign language) 12
Humanities 12
Social Sciences 12

Elective credits: In consultation with his or her advisor, each student will elect sufficient additional courses to complete a minimum of 120 credit hours.

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Bachelor of Arts
Biological Sciences
Degree Requirements

Specific requirements for the B.A. degree in biological sciences include a minimum of 120 semester hours of credit, including 30 hours of biology core courses.

Core Courses Credit
Bio Sc 102-Intro to Bio Sc 1
Bio Sc 110-Gen Bio or Bio Sc 111-Princ Bio 3
Bio Sc 112-Gen Bio Lab 2
Bio Sc 113-Biodiversity 3
Bio Sc 114-Biodiversity Lab 1
Bio Sc 211-Cell Biology 3
Bio Sc 212-Cell Biology Lab 1
Bio Sc 231-Gen Genetics 3
Bio Sc 251-Ecology 3
Bio Sc 310-Seminar 1
Advanced courses, 200 level or higher (at least one with laboratory and one 300 level) 9

Chemistry
Chem 1,2,3, & 4-General Chem 9
Chem 221 & 223-Org Chem 6

Mathematics & Physical Science
Various courses in mathematics, physics, and/or geology chosen in consultation with academic adviser. (Note: Proficiency in College Algebra must be demonstrated by a grade of "C" or better in a College Algebra course or by examination. 9

Computer Science/Statistics (One of the following)
Cmp Sc 053-Intro to Prog 3
Stat 115-Stat for Soc Sci 3
Stat 211-Stat Tools for Decision Making 3

General Requirements for BA
English Composition (English 20 and one additional composition course) 6
Western Civilizations (History 111 and 112) 6
Foreign Language (three semesters of a foreign language) 12
Humanities 12
Social Sciences 12
Electives 15
Total 120 hours

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DC # 0342-2009-BioSci-000-00

Effective Year: 2010
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:
Bachelor of Arts, Pre-Medicine Emphasis Area, Biological Sciences

Department: Biological Sciences

Briefly describe action requested (Attach documentation as appropriate):
We are updating our curriculum to reflect the change in credit hours for organic chemistry classes that are required for our students. These classes (Chem 221 and Chem 223) recently changed from 3 to 4 credit hours each. Please note the minor changes (in red) on the following page.

Recommended by Department: _____ (Chair signature) Date: 11/3/09

Recommended by: Discipline Specific Curricula Committee _____ (Chair signature) Date: 11/3/2009

Approved by Curricula Committee: _____ (Chair signature) Date: _____

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

(Revised 1/31/2008)

10/08/09

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Bachelor of Arts
Biological Sciences
Pre-Medicine Emphasis Area
Degree Requirements

The student will fulfill the requirements for a Bachelor of Arts in Biological Sciences as outlined above. The following classes are also required: Chem 226 & 228 (Org Chem labs), 2 semester of College (General) Physics and labs (Phy 31 (21), 22, 35 (25), 26), courses in Human Anatomy (Bio Sc 241), Human Physiology and Lab (Bio Sc 242/243) and Biochemistry (Chem 361) are highly recommended.

NOTE: No changes to catalog entry, but CAPS report should reflect changes to B.A. curriculum (see next page), which is being amended with a different DC form.

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Bachelor of Arts
Biological Sciences
Degree Requirements

Specific requirements for the B.A. degree in biological sciences include a minimum of 120 semester hours of credit, including 30 hours of biology core courses.

Core Courses Credit
Bio Sc 102-Intro to Bio Sc 1
Bio Sc 110-Gen Bio or Bio Sc 111-Princ Bio 3
Bio Sc 112-Gen Bio Lab 2
Bio Sc 113-Biodiversity 3
Bio Sc 114-Biodiversity Lab 1
Bio Sc 211-Cell Biology 3
Bio Sc 212-Cell Biology Lab 1
Bio Sc 231-Gen Genetics 3
Bio Sc 251-Ecology 3
Bio Sc 310-Seminar 1
Advanced courses, 200 level or higher (at least one with laboratory and one 300 level) 9

Chemistry
Chem 1,2,3, & 4-General Chem 9
Chem 221 & 223-Org Chem 8

Mathematics & Physical Science
Various courses in mathematics, physics, and/or geology chosen in consultation with academic adviser. (Note: Proficiency in College Algebra must be demonstrated by a grade of "C" or better in a College Algebra course or by examination. 9

Computer Science/Statistics (One of the following)
Cmp Sc 053 or 074/078 3
Stat 115-Stat for Soc Sci 3
Stat 211-Stat Tools for Decision Making 3

General Requirements for BA
English Composition (English 20 and one additional composition course) 6
Western Civilizations (History 111 and 112) 6
Foreign Language (three semesters of a foreign language) 12
Humanities 12
Social Sciences 12

Elective credits: In consultation with his or her advisor, each student will elect sufficient additional courses to complete a minimum of 120 credit hours.

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DC #0343-2009-BioSci-000-00

Effective Year: 2010
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:
Bachelor of Arts, Secondary Education Emphasis Area, Biological Sciences

Department: Biological Sciences

Briefly describe action requested (Attach documentation as appropriate):
We are updating our curriculum to reflect the change in credit hours for organic chemistry classes that are required for our students. These classes (Chem 221 and Chem 223) recently changed from 3 to 4 credit hours each. Please note the minor changes (in red) on the following page.

Recommended by Department: _____ (Chair signature) Date: 10/21/09

Recommended by: _____ (Chair signature) Date: 11/3/2009
Discipline Specific Curricula Committee

Approved by Curricula Committee: _____ (Chair signature) Date: _____

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

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Bachelor of Arts
Biological Sciences
Secondary Education Emphasis Area
Degree Requirements

A degree in this emphasis area requires **137 credit hours.** The required courses are provided below. A minimum grade of "C" is required by the department in all mathematics and statistics courses counted toward this degree.

Humanities: 21 semester hours
English 20 (3 hours), English 60 or 160 (3 hours), Speech 85 (3 hours), at least one course in each of: Literature and Philosophy and 2 courses in Fine arts

Social Sciences: 15 semester hours
History 111 (3 hours), History 112 (3 hours), History 175 or 176 (3 hours), Political Science 90 (3 hours), Psychology 50 (3 hours)

Mathematics/Physical Science: 9 semester hours
At least one course in Math and Physics or Geology, proven proficiency at college algebra

Computer Science/Statistics: 3 semester hours
3 semester hours of Computer Science or Statistics

Chemistry: 17 semester hours
Chemistry 1, 2, 3, and 4 (9 hours), Chemistry 221, 223 **(8 hours)**

Biological Sciences: 30 semester hours
28 semester hours of required core coursework, Bio Sc 102 (1 hour), Bio Sc 111/112 (5 hours), Bio Sci 113/114 (4 hours), Bio Sc 211/212 (4 hours), Bio Sc 218 (3 hours), Bio Sc 231 (3 hours), Bio Sc 251 (3 hours), History 275 (3 hours), Bio Sc 310 (1 hour), 3 semester hours of advanced biology elective coursework

Education: 42 semester hours
Educ 40 (2 hours), Educ 104 (2 hours), Educ 164 (2 hours), Educ 174 (2 hours), Educ 216 (3 hours), Educ 251 (3 hours), Educ 280 (6 hours), Educ 298 (1 hour), Educ 299 (12 hours), Psychology 155 (3 hours), Psychology 208 (3 hours), Psychology 354 (3 hours)

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Bachelor of Arts
Biological Sciences
Secondary Education Emphasis Area
Degree Requirements

A degree in this emphasis area requires 135 credit hours. The required courses are provided below. A minimum grade of "C" is required by the department in all mathematics and statistics courses counted toward this degree.

Humanities: 21 semester hours
English 20 (3 hours), English 60 or 160 (3 hours), Speech 85 (3 hours), at least one course in each of: Literature and Philosophy and 2 courses in Fine arts

Social Sciences: 15 semester hours
History 111 (3 hours), History 112 (3 hours), History 175 or 176 (3 hours), Political Science 90 (3 hours), Psychology 50 (3 hours)

Mathematics/Physical Science: 9 semester hours
At least one course in Math and Physics or Geology, proven proficiency at college algebra

Computer Science/Statistics: 3 semester hours
3 semester hours of Computer Science or Statistics

Chemistry: 16 semester hours
Chemistry 1, 2, 3, and 4 (9 hours), Chemistry 221, 223 (6 hours)

Biological Sciences: 30 semester hours
28 semester hours of required core coursework, Bio Sc 102 (1 hour), Bio Sc 111/112 (5 hours), Bio Sci 113/114 (4 hours), Bio Sc 211/212 (4 hours), Bio Sc 218 (3 hours), Bio Sc 231 (3 hours), Bio Sc 251 (3 hours), History 275 (3 hours), Bio Sc 310 (1 hour), 3 semester hours of advanced biology elective coursework

Education: 42 semester hours
Educ 40 (2 hours), Educ 104 (2 hours), Educ 164 (2 hours), Educ 174 (2 hours), Educ 216 (3 hours), Educ 251 (3 hours), Educ 280 (6 hours), Educ 298 (1 hour), Educ 299 (12 hours), Psychology 155 (3 hours), Psychology 208 (3 hours), Psychology 354 (3 hours)

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DC #0344-2009-BioSci-000-00

Effective Year: 2010
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:
Bachelor of Science, Biological Sciences

Department: Biological Sciences

Briefly describe action requested (Attach documentation as appropriate):
We are updating our curriculum to reflect the change in credit hours for organic chemistry classes that are required for our students. These classes (Chem 221 and Chem 223) recently changed from 3 to 4 credit hours each. Please note the minor changes (in red) on the following page.

We are also amending the number of advanced biology credit hours that are required from 22 to 20. This corrects an error and inconsistency between the catalog and CAPS reports.

Recommended by Department: _____ (Chair signature) Date: 10/11/09

Recommended by: Daniel Saintz _____ (Chair signature) Date: 11/3/2009
Discipline Specific Curricula Committee

Approved by Curricula Committee: _____ (Chair signature) Date: _____

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

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Bachelor of Science
Biological Sciences
Degree Requirements

A minimum of 130 credit hours is required for a Bachelor of Science degree in Biological Science and an average of at least two grade points per credit hour must be obtained. These requirements for the B.S. degree are in addition to credit received for basic ROTC. The Biological Science B.S. degree must include 46 semester hours of biological sciences course work, to include:

Bio Sc 102-Intro to Bio Sc 1
Bio 110-Gen Bio or Bio Sc 111-Princ Bio 3
Bio Sc 112-Gen Bio Lab 2
Bio Sc 113 -Biodiversity 3
Bio Sc 114-Biodiversity Lab 1
Bio Sc 211-Cellular Biology 3
Bio Sc 212-Cellular Biology Lab 1
Bio Sc 221-Microbiology 3
Bio Sc 222-Microbiology Lab 2
Bio Sc 231-General Genetics 3
Bio Sc 251-Ecology 3
Bio Sc 310-Seminar 1

Advanced biological sciences or approved course work in other departments for a total of 46 credit hours of biology-related classes 20

22 semester hours of chemistry to include:
Chem 1,2,3, & 4 (General chemistry) 9
Chem 221, 226, 223, 228 (Org Chem and labs) . .10
Chem 361 (Biochemistry) 3

2 semesters of College (General) Physics and labs
Phys 31 (21), 22, 35 (25), 26 . . . . . 8 (10)

The Math/Statistics requirement will be a minimum of 10 credit hours with a requirement for Math 8 or Math 14.

12 semester hours of humanities, excluding foreign language, and to include: English 20 (entering students will normally take English 20 either semester of the first year) and English 60 12

9 semesters hours of social sciences, (to include Hist 112 or 175 or 176 or Pol Sc 90, or equivalent 9

Elective credits: In consultation with his or her advisor, each student will elect sufficient additional courses to complete a minimum of 130 credit hours. A minimum grade of "C" is required for each Biological Science course used to fulfill the B.S. degree requirements.

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Bachelor of Science
Biological Sciences
Degree Requirements

A minimum of 130 credit hours is required for a Bachelor of Science degree in Biological Science and an average of at least two grade points per credit hour must be obtained. These requirements for the B.S. degree are in addition to credit received for basic ROTC. The Biological Science B.S. degree must include 46 semester hours of biological sciences course work, to include:

Bio Sc 102-Intro to Bio Sc 1
Bio 110-Gen Bio or Bio Sc 111-Princ Bio 3
Bio Sc 112-Gen Bio Lab 2
Bio Sc 113 -Biodiversity 3
Bio Sc 114-Biodiversity Lab 1
Bio Sc 211-Cellular Biology 3
Bio Sc 212-Cellular Biology Lab 1
Bio Sc 221-Microbiology 3
Bio Sc 222-Microbiology Lab 2
Bio Sc 231-General Genetics 3
Bio Sc 251-Ecology 3
Bio Sc 310-Seminar 1

Advanced biological sciences or approved course work in other departments for a total of 46 credit hours of biology-related classes 20

20 semester hours of chemistry to include general chemistry (Chem 1,2,3, & 4) 9
Chem 221, 226, 223, 228-Org Chem 8
Chem 361 General Biochemistry 3

2 semesters of College (General) Physics and labs Phys 31 (21), 22, 35 (25), 268 . . . . . (10)
The Math/Statistics requirement will be a minimum of 10 credit hours with a requirement for Math 8 or Math 14.

12 semester hours of humanities, excluding foreign language, and to include: English 20 (entering students will normally take English 20 either semester of the first year) and English 60 12

9 semesters hours of social sciences, (to include Hist 112 or 175 or 176 or Pol Sc 90, or equivalent 9

Elective credits: In consultation with his or her advisor, each student will elect sufficient additional courses to complete a minimum of 130 credit hours. A minimum grade of "C" is required for each Biological Science course used to fulfill the B.S. degree requirements.

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Effective Year: 2010
Effective Term: Summer ☐ Fall ☒ Spring ☐

CC File #1845-2009-EE-405-34

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 Engineering
2. **Discipline and Course Number:** **Present :** EE 405 **Proposed:**
3. **Course Title:** **Present: Power System Protection**
   Proposed: same
   Abbreviated Course Title: Power System Protection
   (24 Spaces or Less. Only needed for New Courses or Title Changes.)
4. **Catalog Description** *(40 Words or Less)*
   Present: Protective relaying incorporating electromechanical, solid state & modern computer relaying methods for high voltage transmission systems. Pilot wire, power line carrier apparatus, bus protection, circuit breaker interruption characteristics, out of step relaying, reclosing, synchronizing, load & frequency relaying
   Proposed: Protective relaying incorporating electromechanical, solid state and computer relaying methods for high voltage transmission systems; instrument transformers; generator, transformer, line and bus protection; effect of system grounding; pilot protection and out of step relaying principles.
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: EE 303 & EE 307
   Proposed:
8. **Required for Majors:** ☐ **Elective for Majors:** ☒
9. **Justification:** The new description correctly reflects the contents of this course.
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 Kelli Emslie (Chair signature) Date: 28 Sep 09

Recommended by Discipline Specific Curricula Committee Jerry R. Boyle (Chair signature) Date: 10-19-09

Approved by Curricula Committee: _____ (Chair signature) Date: _____

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

09/28/09 (Revised 1/31/08)

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Elec Eng 405 Power System Protection

Old Catalog Description:

Protective relaying incorporating electromechanical, solid state and modern computer relaying methods for high voltage transmission systems. Pilot wire, power line carrier apparatus, bus protection, circuit breaker interruption characteristics, out of step relaying, reclosing, synchronizing, load and frequency relaying.

New Catalog Description:

Protective relaying incorporating electromechanical, solid state and computer relaying methods for high voltage transmission systems; instrument transformers; generator, transformer, line and bus protection; effect of system grounding; pilot protection and out of step relaying principles.

Prerequisite: No change

Reason for change: The new description correctly reflects the contents of the course.

Effective: Fall 2011

Effective Year: 2010
Effective Term: Summer ☐ Fall ☒ Spring ☐

CC File # 1846-2009-EE-404-33

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 Engineering
2. **Discipline and Course Number:** **Present : EE 404** **Proposed:**
3. **Course Title:** **Present: Economic Operation of Power Systems**
   Proposed: Power System Operations
   Abbreviated Course Title: Power System Operations
   (24 Spaces or Less. Only needed for New Courses or Title Changes.)
4. **Catalog Description** *(40 Words or Less)*
   Present: Optimum economic loading of thermal plants determined by the method of Lagrange multipliers, derivation of the system loss matrix & its transformation to the most useful basis, practical evaluation of the matrix elements, extension of optimum loading criteria to include system losses, effect of hydro plants on system economics.
   Proposed: Optimal dispatch operations, economic loading of power plants, mathematical optimization, locational marginal pricing, optimal power flow; effect of hydro and wind power plants on system economics; contingency analysis and system securtity, state estimation.
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: EE 307
   Proposed:
8. **Required for Majors:** ☐ **Elective for Majors:** ☒
9. **Justification:** The new title correctly reflects the contents of the course.
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 _____ (Chair signature) Date: 25Sep09

Recommended by Discipline Specific Curricula Committee _____ (Chair signature) Date: 10-19-09

Approved by Curricula Committee: _____ (Chair signature) Date: _____

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

09/25/09 (Revised 1/31/08)

This fax was received by GFI FAXmaker fax server. For more information, visit: http://www.gfi.com

Elec Eng 404

Old Title: Economic Operation of Power Systems

New Title: Power System Operations

Old Catalog Description:

Optimum economic loading of thermal plants determined by the method of Lagrange multipliers, derivation of the system loss matrix and its transformation to the most useful basis, practical evaluation of the matrix elements, extension of optimum loading criteria to include system losses, effect of hydro plants on system economics.

New Catalog Description:

Optimal dispatch operations, economic loading of power plants, mathematical optimization, locational marginal pricing, optimal power flow; effect of hydro and wind power plants on system economics; contingency analysis and system security, state estimation.

Prerequisite: No change

Reason for change: The new title correctly reflects the contents of the course.

Effective: Fall 2010

Effective Year: 2010
Term: **Summer** ☐ **Fall** ☐ **Spring** ☒

CC File # 7847-2009-PE-406-3

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:** Geol Sci and Engineering
2. **Discipline and Course Number:** **Present :** Pet Eng 406 **Proposed:** Pet Eng 408
3. **Course Title:** **Present:** **Advanced Reservoir Simulation**
   Proposed:
   Abbreviated Course Title: Adv Reservoir Sim
   (24 Spaces or Less. Only needed for New Courses or Title Changes.)
4. **Catalog Description** *(300 Character Spaces or Less.)*
   Present: Advanced techniques in reservoir simulation.

   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: Petr 308

   Proposed:

8. **Required for Majors:** ☐ **Elective for Majors:** ☒
9. **Justification:** Achieve consistency with numbers. Petr 308 is the first reservoir simulation course, we want to use Petr 408 as the second course.

10. **Semesters previously offered as an experimental course (101, 201, 301, 401):** N/A
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 _____ (Chair signature) Date: 9/25/09

Recommended by Discipline Specific Curricula Committee _____ (Chair signature) Date: 10-19-09

Approved by Curricula Committee: _____ (Chair signature) Date: _____

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

(Revised 1/29/09)

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Effective Year: 2010
Effective Term: **Summer** ☐ **Fall** ☐ **Spring** ☒

CC File # 7848-2009-GE-235-2

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:** Geological Science and Engineering
2. **Discipline and Course Number:** **Present :** Geo Eng 235 **Proposed:**
3. **Course Title:** **Present:** **Environmental Geoscience**
   Proposed:
   Abbreviated Course Title:
   (24 Spaces or Less. Only needed for New Courses or Title Changes.)
4. **Catalog Description** *(40 Words or Less)*
   Present:

   Proposed:

5. **If course requires field trip check box:** ☐
6. **Credit Hours:** **Present:** **Lecture:** **Lab:** **Total:**
   Proposed: **Lecture:** **Lab:** **Total:**
7. **Prerequisites:**
   Present:

   Proposed:

8. **Required for Majors:** ☐ **Elective for Majors:** ☐
9. **Justification:** This course has not been taught within the past 10 years, and there are no plans to teach it in the near future.

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 RGF (Chair signature) Date: 9/25/09

Recommended by Discipline Specific Curricula Committee (Chair signature) Date: 10-19-09

Approved by Curricula Committee: (Chair signature) Date:

...ved by Faculty Senate: (Chair signature) Date:

(Revised 1/31/08)

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CC File # 7849-2009-GE-340-2

Effective Year: 2010
Effective 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:** Geological Science and Engineering
2. **Discipline and Course Number:** **Present :** Geo Eng 340 **Proposed:**
3. **Course Title:** **Present:** **Fld Opr/Ground Water Hyd**
   Proposed:
   Abbreviated Course Title:
   (24 Spaces or Less. Only needed for New Courses or Title Changes.)
4. **Catalog Description** *(40 Words or Less)*
   Present:

   Proposed:

5. **If course requires field trip check box:** ☐
6. **Credit Hours:** **Present:** **Lecture:** **Lab:** **Total:**
   Proposed: **Lecture:** **Lab:** **Total:**
7. **Prerequisites:**
   Present:

   Proposed:

8. **Required for Majors:** ☐ **Elective for Majors:** ☐
9. **Justification:** This course has not been taught within the past 10 years, and there are no plans to teach it in the near future.

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 RJF Robert C. Bauder Date: 9/25/09
(Chair signature)

Recommended by Discipline Specific Curricula Committee Jerry D. Boyle Date: 10-19-09
(Chair signature)

Approved by Curricula Committee: _____ Date: _____
(Chair signature)

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

(Revised 1/31/08)

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CC File # 7850-2009-GE-349-2

Effective Year: 2010
Effective 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:** Geological Science and Engineering
2. **Discipline and Course Number:** **Present :** Geo Eng 349 **Proposed:**
3. **Course Title:** **Present:** **Comp Appl in Geol Engr**
   Proposed:
   Abbreviated Course Title:
   (24 Spaces or Less. Only needed for New Courses or Title Changes.)
4. **Catalog Description** *(40 Words or Less)*
   Present:

   Proposed:

5. **If course requires field trip check box:** ☐
6. **Credit Hours:** **Present:** **Lecture:** **Lab:** **Total:**
   Proposed: **Lecture:** **Lab:** **Total:**
7. **Prerequisites:**
   Present:

   Proposed:

8. **Required for Majors:** ☐ **Elective for Majors:** ☐
9. **Justification:** This course has not been taught within the past 10 years, and there are no plans to teach it in the near future.

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 RGF (Chair signature) Date: 9/25/09

Recommended by Discipline Specific Curricula Committee (Chair signature) Date: 10-19-09

Approved by Curricula Committee: (Chair signature) Date:

Approved by Faculty Senate: (Chair signature) Date:

(Revised 1/31/08)

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CC File # 7851-2009-GE-351-2

Effective Year: 2010
Effective 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:** Geological Science and Engineering
2. **Discipline and Course Number:** **Present :** Geo Eng 351 **Proposed:**
3. **Course Title:** **Present:** **Geological Eng Case Hist**
   Proposed:
   Abbreviated Course Title:
   (24 Spaces or Less. Only needed for New Courses or Title Changes.)
4. **Catalog Description** *(40 Words or Less)*
   Present:

   Proposed:

5. **If course requires field trip check box:** ☐
6. **Credit Hours:** **Present:** **Lecture:** **Lab:** **Total:**
   Proposed: **Lecture:** **Lab:** **Total:**
7. **Prerequisites:**
   Present:

   Proposed:

8. **Required for Majors:** ☐ **Elective for Majors:** ☐
9. **Justification:** This course has not been taught within the past 10 years, and there are no plans to teach it in the near future.

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 RBF Robert E. Criss (Chair signature) Date: 9/25/09

Recommended by Discipline Specific Curricula Committee Jerry A. Bengtson (Chair signature) Date: 10-19-09

Approved by Curricula Committee: _____ (Chair signature) Date: _____

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

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Effective Year: 2010
Effective Term: Summer ☐ Fall ☐ Spring ☒

CC File # 7852-2009-GE-415-2

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:** Geological Science and Engineering
2. **Discipline and Course Number:** **Present :** Geo Eng 415 **Proposed:**
3. **Course Title:** **Present:** **Advanced Geostatistics**
   Proposed:
   Abbreviated Course Title:
   (24 Spaces or Less. Only needed for New Courses or Title Changes.)
4. **Catalog Description** *(40 Words or Less)*
   Present:

   Proposed:

5. **If course requires field trip check box:** ☐
6. **Credit Hours:** **Present:** **Lecture:** **Lab:** **Total:**
   Proposed: **Lecture:** **Lab:** **Total:**
7. **Prerequisites:**
   Present:

   Proposed:

8. **Required for Majors:** ☐ **Elective for Majors:** ☐
9. **Justification:** This course has not been taught within the past 10 years, and there are no plans to teach it in the near future.

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 RGF (Chair signature) Date: 9/25/09

Recommended by Discipline Specific Curricula Committee (Chair signature) Date: 10-19-09

Approved by Curricula Committee: (Chair signature) Date: _____

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

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CC File #7853-2009-GE-438-2

Effective Year: 2010
Effective 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:** Geological Science and Engineering
2. **Discipline and Course Number:** **Present :** Geo Eng 438 **Proposed:**
3. **Course Title:** **Present:** **Rem Eng Uncont Haz Waste**
   Proposed:
   Abbreviated Course Title:
   (24 Spaces or Less. Only needed for New Courses or Title Changes.)
4. **Catalog Description** *(40 Words or Less)*
   Present:

   Proposed:

5. **If course requires field trip check box:** ☐
6. **Credit Hours:** **Present:** **Lecture:** **Lab:** **Total:**
   Proposed: **Lecture:** **Lab:** **Total:**
7. **Prerequisites:**
   Present:

   Proposed:

8. **Required for Majors:** ☐ **Elective for Majors:** ☐
9. **Justification:** This course has not been taught within the past 10 years, and there are no plans to teach it in the near future.

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 RGF Robert E. Criddle (Chair signature) Date: 7/25/09

Recommended by Discipline Specific Curricula Committee John H. Doyle (Chair signature) Date: 10-19-09

Approved by Curricula Committee: _____ (Chair signature) Date: _____

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

(Revised 1/31/08)

This fax was received by GFI FAXmaker fax server. For more information, visit: http://www.gfi.com

CC File # 7854-2009-EngGr-212-2

Effective Year: 2010
Effective 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:** Interdisciplinary Engineering
2. **Discipline and Course Number:** **Present :** Eng Gr 212 **Proposed:**
3. **Course Title:** **Present:** **Computer Aided Drafting**
   Proposed:
   Abbreviated Course Title:
   (24 Spaces or Less. Only needed for New Courses or Title Changes.)
4. **Catalog Description** *(40 Words or Less)*
   Present:

   Proposed:

5. **If course requires field trip check box:** ☐
6. **Credit Hours:** **Present:** **Lecture:** **Lab:** **Total:**
   Proposed: **Lecture:** **Lab:** **Total:**
7. **Prerequisites:**
   Present:

   Proposed:

8. **Required for Majors:** ☐ **Elective for Majors:** ☐
9. **Justification:** This course has not been taught within the past 10 years, and there are no plans to teach it in the near future.

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 _____ (Chair signature) Date: 9/24/09

Recommended by Discipline Specific Curricula Committee _____ (Chair signature) Date: 10-19-09

Approved by Curricula Committee: _____ (Chair signature) Date: _____

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

(Revised 1/31/08)

This fax was received by GFI FAXmaker fax server. For more information, visit: http://www.gfi.com

Effective Year: 2010
Term: Summer ☐ **Fall** ☐ **Spring** ☒

CC File # 7855-2009-Engt-357-3

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: Eng Mgmt and Systems Eng

2. Discipline and Course Number: **Present:** ENG MGT 357 **Proposed:**

3. Course Title: **Present:** **Advanced Facilities Planning & Design**
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: Development of an integrated approach to the planning and design of facilities; examination of advanced techniques and tools for facility location, space allocation, facility layout materials handling system design, work place design; e.g. mathematical programming, simulation modeling, CAD system

Proposed: An integrated approach to the planning and design of facilities; examination of advanced techniques and tools for facility location, space allocation, facility layout materials handling system design, work place design; e.g. mathematical programming and simulation modeling.

5. If course requires field trip check box: ☐

6. Credit Hours:
Present: **Lecture:** 1.0 **Lab:** 2.0 **Total:** 3.0
Proposed: **Lecture:** 2.0 **Lab:** 1.0 **Total:** 3.0

7. Prerequisites:
Present: ENG MGT 257 or instructor's permission

Proposed:

8. Required for Majors: ☐ **Elective for Majors:** ☒

9. Justification: Update catalog description to 300 characters or less. Change lab from 2 hours to 1 hour to reflect actual practice.

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 _____ (Chair signature) Date: 9/20/09

Recommended by Discipline Specific Curricula Committee _____ (Chair signature) Date: 10-19-09

Approved by Curricula Committee: _____ (Chair signature) Date: _____

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

(Revised 1/29/09)

This fax was received by GFI FAXmaker fax server. For more information, visit: http://www.gfi.com

Effective Year: 2010
Term: **Summer** ☐ **Fall** ☒ **Spring** ☐

CC File # 7858-2009-IST-368-32

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 :** IST 368 **Proposed:**
3. **Course Title:** **Present:** **Law and Ethics in E-Commerce**
   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: Provides the ethical framework to analyze the ethical, legal, and social issues that arise for citizens and computer professionals regarding the computerization of society. Topics include: free speech, privacy, intellectual property, product liability, and professional responsibility.

   Proposed:

5. **If course requires field trip check box:** ☐
6. **Credit Hours:** **Present:** **Lecture:** 3.0 **Lab:** **Total:**
   Proposed: **Lecture:** **Lab:** **Total:**
7. **Prerequisites:**
   Present: Any intro level Philosophy course

   Proposed: none

8. **Required for Majors:** ☐ **Elective for Majors:** ☒
9. **Justification:** Prerequisite change based on current content of the course and instructor feedback.

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) Phil **2)** **3)**

4) **5)** **6)**

Recommended by Department Caroline Fisher (Chair signature) Date: 10/16/09

Recommended by Discipline Specific Curricula Committee (Chair signature) Date: 10/4/09

Approved by Curricula Committee: _____ (Chair signature) Date: _____

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

(Revised 1/29/09)

Effective Year: 2010
Term: Summer ☐ Fall ☒ Spring ☐

CC File # 7859-2009-BUS-110-32

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 :** BUS 110 **Proposed:**

3. Course Title: **Present:** **Management and Organizational Behavior**

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: The course provides coverage of classic and current management principles, as well as the study of the behavior of individuals and groups in an organizational setting. Topics include motivation, leadership, organizational design, and conflict resolution.

Proposed: The course provides an introduction to the basic concepts of management and organization to give all majors an awareness of what functions and challenges are faced by managers in today's global environment; their applications to the organization, operations, and resources are discussed.

5. If course requires field trip check box: ☐

6. Credit Hours:

Present:	**Lecture:** 3.0	**Lab:**	**Total:**
Proposed:	**Lecture:**	**Lab:**	**Total:**

7. Prerequisites:

Present: Psych 50

Proposed: none

8. Required for Majors: ☒ **Elective for Majors:** ☐

9. Justification: Updated description and prerequisite change based on current content of the course and instructor feedback.

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 _____ (Chair signature) Date: 10/16/09

Recommended by Discipline Specific Curricula Committee _____ (Chair signature) Date: 11/4/09

Approved by Curricula Committee: _____ (Chair signature) Date: _____

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

(Revised 1/29/09)

Effective Year: 2010
Term: Summer ☐ Fall ☒ Spring ☐

CC File # 7860-2009-BUS-120-32

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 :** BUS 120 **Proposed:**
3. **Course Title:** **Present:** **Financial Accounting**
   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: This course is an introduction to financial accounting and its significant role in making sound business decisions. Emphasis is on what accounting information is, why it is important, and how it is used to make strategic economic decisions.

   Proposed:
5. **If course requires field trip check box:** ☐
6. **Credit Hours:** **Present:** **Lecture:** 3.0 **Lab:** **Total:**
   Proposed: **Lecture:** **Lab:** **Total:**
7. **Prerequisites:**
   Present: Math 4

   Proposed: none
8. **Required for Majors:** ☒ **Elective for Majors:** ☐
9. **Justification:** Prerequisite change based on current content of the course and instructor feedback.

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 _____ (Chair signature) Date: 10/16/09

Recommended by Discipline Specific Curricula Committee _____ (Chair signature) Date: 11/4/09

Approved by Curricula Committee: _____ (Chair signature) Date: _____

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

(Revised 1/29/09)

Effective Year: 2010
Term: Summer ☐ **Fall** ☒ **Spring** ☐

CC File # 7861-2009-BUS-320-32

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 :** BUS 320 **Proposed:**
3. **Course Title:** **Present:** **Managerial Accounting**
   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: Emphasizes inernal use of accounting information in establishing plans and objectives, controlling operations, and making decisions involved with management of an enterprise (the determination of costs relevant to a specific purpose such as inventory valuation, control of current operation, or speci
   Proposed:
5. **If course requires field trip check box:** ☐
6. **Credit Hours:** **Present:** **Lecture:** 3.0 **Lab:** **Total:**
   Proposed: **Lecture:** **Lab:** **Total:**
7. **Prerequisites:**
   Present: BUS 120
   Proposed: BUS 120 or Eng Mgt 130 or Eng Mgt 131 or Eng Mgt 230
8. **Required for Majors:** ☒ **Elective for Majors:** ☐
9. **Justification:** Prerequisite change based on current content of the course and instructor feedback.
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 (Chair signature) Date: 10/16/09

Recommended by Discipline Specific Curricula Committee Gary Hackbart (Chair signature) Date: 11/4/09

Approved by Curricula Committee: _____ (Chair signature) Date: _____

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

(Revised 1/29/09)

Effective Year: 2010
Term: **Summer** ☐ **Fall** ☒ **Spring** ☐

CC File # 7862-2009-BUS-360-32

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 :** BUS 360 **Proposed:**
3. **Course Title:** **Present:** **Business Operations**
   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: This course examines the concepts, processes, and institutions that are fundamental to an understanding of business operations within organizations. Emphasis is on the management and organization of manufacturing and service operations and the application of quantitative methods to the solution of
   Proposed:
5. **If course requires field trip check box:** ☐
6. **Credit Hours:** **Present:** **Lecture:** 3.0 **Lab:** **Total:**
   Proposed: **Lecture:** **Lab:** **Total:**
7. **Prerequisites:**
   Present: Math 12, Stat 211, and Bus 120
   Proposed: Math 8 or 12 or 14, any Statistics course, Bus 120 or Eng Mgt 130 or Eng Mgt 131 or Eng Mgt 230
8. **Required for Majors:** ☒ **Elective for Majors:** ☐
9. **Justification:** Prerequisite change based on current content of the course and instructor feedback.
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 _____ (Chair signature) Date: 10/16/09

Recommended by Discipline Specific Curricula Committee _____ (Chair signature) Date: 11/4/09

Approved by Curricula Committee: _____ (Chair signature) Date: _____

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

(Revised 1/29/09)

Effective Year: 2010
Term: **Summer** ☐ **Fall** ☒ **Spring** ☐

CC File # 7863-2009-BUS-380-32

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 :** BUS 380 **Proposed:**

3. Course Title: **Present:** **Strategic Management**
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: Study of the formulations and implementation of corporative, business, and functional strategies designed to achieve organizational objectives. Case studies and research reports may be used extensively.

Proposed:

5. If course requires field trip check box: ☐

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

7. Prerequisites:
Present: MKT 311 and FIN 250; Senior Standing

Proposed: (MKT 311 or Eng Mgt 251) and (FIN 250 or Eng Mgt 252) and Senior standing

8. Required for Majors: ☒ **Elective for Majors:** ☐

9. Justification: Prerequisite change based on current content of the course and instructor feedback.

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 _____ (Chair signature) Date: 10/16/09

Recommended by Discipline Specific Curricula Committee _____ (Chair signature) Date: 11/4/09

Approved by Curricula Committee: _____ (Chair signature) Date: _____

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

(Revised 1/29/09)

Effective Year: 2010
Term: **Summer** ☐ **Fall** ☒ **Spring** ☐

CC File # 7864-2009-ERP-246-32

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 246 **Proposed:**
3. **Course Title:** **Present:** **Introduction to Enterprise Resource Planning**
   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: Fundamentals of enterprise resource planning (ERP) systems concepts, and the importance of integrated information systems in an organization. The focus of this course is on illustrating procurement, production, and sales business processes using ERP software. Use of SAP as and example ERP system.
   Proposed:
5. **If course requires field trip check box:** ☐
6. **Credit Hours:** **Present:** **Lecture:** 3.0 **Lab:** **Total:**
   Proposed: **Lecture:** **Lab:** **Total:**
7. **Prerequisites:**
   Present: IST 51
   Proposed: IST 50
8. **Required for Majors:** ☒ **Elective for Majors:** ☐
9. **Justification:** Prerequisite change based on current content of the course and instructor feedback.
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 _____ (Chair signature) Date: 10/16/09

Recommended by Discipline Specific Curricula Committee _____ (Chair signature) Date: 11/4/09

Approved by Curricula Committee: _____ (Chair signature) Date: _____

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

(Revised 1/29/09)

Effective Year: 2010
Term: **Summer** ☐ **Fall** ☒ **Spring** ☐

CC File # 7865-2009-FIN-250-32

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 :** FIN 250 **Proposed:**
3. **Course Title:** **Present:** **Corporate Finance I**
   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: This course studies the need for funds in business and the techniques of analysis used to determine how effectively thses funds are invested within the firm. Topics include institutions, instruments, and markets concerned with raising funds.

   Proposed:
5. **If course requires field trip check box:** ☐
6. **Credit Hours:** **Present:** **Lecture:** 3.0 **Lab:** **Total:**
   Proposed: **Lecture:** **Lab:** **Total:**
7. **Prerequisites:**
   Present: BUS 120, and Econ 121 or Econ 122

   Proposed: (BUS 120 or Eng Mgt 130 or Eng Mgt 131 or Eng Mgt 230) and (Econ 121 or Econ 122)
8. **Required for Majors:** ☒ **Elective for Majors:** ☐
9. **Justification:** Prerequisite change based on current content of the course and instructor feedback.

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 _____ (Chair signature) Date: 11/4/09

Recommended by Discipline Specific Curricula Committee _____ (Chair signature) Date: 11/5/09

Approved by Curricula Committee: _____ (Chair signature) Date: _____

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

(Revised 1/29/09)

Effective Year: 2010
Term: **Summer** ☐ **Fall** ☒ **Spring** ☐

CC File # 7866-2009-IST-223-32

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 :** IST 223 **Proposed:**
3. **Course Title:** **Present:** **Database Management**
   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: The course introduces the concepts of database management systems. Issues in database architecture, design, administration, and implementation are covered.

   Proposed:
5. **If course requires field trip check box:** ☐
6. **Credit Hours:** **Present:** **Lecture:** 3.0 **Lab:** **Total:**
   Proposed: **Lecture:** **Lab:** **Total:**
7. **Prerequisites:**
   Present: IST 141

   Proposed: IST 50 and (IST 151 or Comp Sci 153)
8. **Required for Majors:** ☒ **Elective for Majors:** ☐
9. **Justification:** IST 141 no longer exists. Prerequisite change based on current content of the course and instructor feedback.
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 _____ (Chair signature) Date: 10/16/09

Recommended by Discipline Specific Curricula Committee _____ (Chair signature) Date: 11/4/09

Approved by Curricula Committee: _____ (Chair signature) Date: _____

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

(Revised 1/29/09)

Effective Year: 2010
Term: **Summer** ☐ **Fall** ☒ **Spring** ☐

CC File # 7867-2009-IST-241-32

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 :** IST 241 **Proposed:**

3. Course Title: **Present:** **E-Commerce**
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: Introduction to fundamental concepts of management and application to Information Technologies. This course examines the use of IT in business processes and the management issues of integrating IT inro organization processes to gain a competitive advantage. Topics include: management; organizatio

Proposed:

5. If course requires field trip check box: ☐

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

7. Prerequisites:
Present: IST 141, IST 286

Proposed: IST 50 and IST 286

8. Required for Majors: ☒ **Elective for Majors:** ☐

9. Justification: IST 141 no longer exists. Prerequisite change based on current content of the course and instructor feedback.

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 _____ (Chair signature) Date: 11/4/09

Recommended by Discipline Specific Curricula Committee _____ (Chair signature) Date: 11/5/09

Approved by Curricula Committee: _____ (Chair signature) Date: _____

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

(Revised 1/29/09)

Effective Year: 2010
Term: **Summer** ☐ **Fall** ☒ **Spring** ☐

CC File # 7868-2009-IST-354-32

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 :** IST 354 **Proposed:**
3. **Course Title:** **Present:** **Multi-Media Development and Design**
   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: Students will learn current practices for development and design of interactive multimedia. The course covers tools for development of 2-D and 3-D graphics, video, audi, animation, and interated multimedia environments.

   Proposed:
5. **If course requires field trip check box:** ☐
6. **Credit Hours:** **Present:** **Lecture:** 3.0 **Lab:** **Total:**
   Proposed: **Lecture:** **Lab:** **Total:**
7. **Prerequisites:**
   Present: IST 51, Cmp Sc 53 or Cmp Sc 73

   Proposed: IST 51 or Comp Sci 53 or Comp Sci 73 or Comp Sci 74
8. **Required for Majors:** ☐ **Elective for Majors:** ☒
9. **Justification:** Prerequisite change based on current content of the course and instructor feedback.
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 _____ (Chair signature) Date: 10/16/09

Recommended by Discipline Specific Curricula Committee _____ (Chair signature) Date: 11/4/09

Approved by Curricula Committee: _____ (Chair signature) Date: _____

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

(Revised 1/29/09)

CC File # 7870-2009-ME-324-20

Effective Year: 2010
Effective 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 Engineering
2. **Discipline and Course Number:** **Present:** Engineering Mechanics 324 **Proposed:**
3. **Course Title:** **Present:** Engr Plasticity I
   Proposed:
   Abbreviated Course Title:
   (24 Spaces or Less. Only needed for New Courses or Title Changes.)
4. **Catalog Description** *(40 Words or Less)*
   Present:

   Proposed:

5. **If course requires field trip check box:** ☐
6. **Credit Hours:** **Present:** **Lecture:** **Lab:** **Total:**
   Proposed: **Lecture:** **Lab:** **Total:**
7. **Prerequisites:**
   Present:

   Proposed:

8. **Required for Majors:** ☐ **Elective for Majors:** ☐
9. **Justification:** The engineering mechanics programs have all been discontinued and there are no more students enrolled. All engineering mechanics courses will either be eliminated or renamed/renumbered using a curricular designator other than ENG MECH.

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 _____ (Chair signature) Date: 10/09/09

Recommended by Discipline Specific Curricula Committee _____ (Chair signature) Date: 11-1-09

Approved by Curricula Committee: _____ (Chair signature) Date: _____

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

(Revised 1/31/08)

08/19/09

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CC File # 7871-2009-Emech-424-20

Effective Year: 2010
Effective 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 Engineering
2. **Discipline and Course Number:** **Present:** Engineering Mechanics 424 **Proposed:**
3. **Course Title:** **Present:** Engr Plasticity II
   Proposed:
   Abbreviated Course Title:
   (24 Spaces or Less. Only needed for New Courses or Title Changes.)
4. **Catalog Description** *(40 Words or Less)*
   Present:

   Proposed:

5. **If course requires field trip check box:** ☐
6. **Credit Hours:** **Present:** **Lecture:** **Lab:** **Total:**
   Proposed: **Lecture:** **Lab:** **Total:**
7. **Prerequisites:**
   Present:

   Proposed:

8. **Required for Majors:** ☐ **Elective for Majors:** ☐
9. **Justification:** The engineering mechanics programs have all been discontinued and there are no more students enrolled. All engineering mechanics courses will either be eliminated or renamed/renumbered using a curricular designator other than ENG MECH.

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 _____ Date: 10/09/09
(Chair signature)

Recommended by Discipline Specific Curricula Committee _____ Date: 11-1-09
(Chair signature)

Approved by Curricula Committee: _____ Date: _____
(Chair signature)

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

(Revised 1/31/08)

08/19/09

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CC File # 7872-2009-AE-321-20

Effective Year: 2010
Effective 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 Engineering
2. **Discipline and Course Number:** **Present :** Aero Eng 321 **Proposed:**
3. **Course Title:** **Present:** **Aerodynamics Cad Design**
   Proposed:
   Abbreviated Course Title:
   (24 Spaces or Less. Only needed for New Courses or Title Changes.)
4. **Catalog Description** *(40 Words or Less)*
   Present:

   Proposed:

5. **If course requires field trip check box:** ☐
6. **Credit Hours:** **Present:** **Lecture:** **Lab:** **Total:**
   Proposed: **Lecture:** **Lab:** **Total:**
7. **Prerequisites:**
   Present:

   Proposed:

8. **Required for Majors:** ☐ **Elective for Majors:** ☐
9. **Justification:** This course has not been taught within the past 10 years, and there are no plans to teach it in the near future.

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 _____ (Chair signature) Date: 10/09/09

Recommended by Discipline Specific Curricula Committee _____ (Chair signature) Date: 11-1-09

Approved by Curricula Committee: _____ (Chair signature) Date: _____

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

(Revised 1/31/08)

08/21/09

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CC File # 7873-2009-AE-341-20

Effective Year: 2010
Effective 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 Engineering
2. **Discipline and Course Number:** **Present:** Aero Eng 341 **Proposed:**
3. **Course Title:** **Present:** Exper Stress Analysis I
   Proposed:
   Abbreviated Course Title:
   (24 Spaces or Less. Only needed for New Courses or Title Changes.)
4. **Catalog Description** *(40 Words or Less)*
   Present:

   Proposed:

5. **If course requires field trip check box:** ☐
6. **Credit Hours:** **Present:** **Lecture:** **Lab:** **Total:**
   Proposed: **Lecture:** **Lab:** **Total:**
7. **Prerequisites:**
   Present:

   Proposed:

8. **Required for Majors:** ☐ **Elective for Majors:** ☐
9. **Justification:** This course has not been taught within the past 10 years, and there are no plans to teach it in the near future.

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 _____ (Chair signature) Date: 10/29/09

Recommended by Discipline Specific Curricula Committee _____ (Chair signature) Date: 11-1-09

Approved by Curricula Committee: _____ (Chair signature) Date: _____

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

(Revised 1/31/08)

08/21/09

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CC File # 7874-2009-AE-487-20

Effective Year: 2010
Effective 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 Engineering
2. **Discipline and Course Number:** **Present :** Aero Eng 487 **Proposed:**
3. **Course Title:** **Present:** Finite Elem Approx III
   Proposed:
   Abbreviated Course Title:
   (24 Spaces or Less. Only needed for New Courses or Title Changes.)
4. **Catalog Description** *(40 Words or Less)*
   Present:

   Proposed:

5. **If course requires field trip check box:** ☐
6. **Credit Hours:** **Present:** **Lecture:** **Lab:** **Total:**
   Proposed: **Lecture:** **Lab:** **Total:**
7. **Prerequisites:**
   Present:

   Proposed:

8. **Required for Majors:** ☐ **Elective for Majors:** ☐
9. **Justification:** This course has not been taught within the past 10 years, and there are no plans to teach it in the near future.

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) Mc Eng 487 2) 3)

4) 5) 6)

Recommended by Department _____ (Chair signature) Date: 10/09/09

Recommended by Discipline Specific Curricula Committee _____ (Chair signature) Date: 11-1-09

Approved by Curricula Committee: _____ (Chair signature) Date: _____

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

(Revised 1/31/08)

08/21/09

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CC File #7875-2009-ME-337-20

Effective Year: 2010
Effective 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 Engineering
2. **Discipline and Course Number:** **Present :** Mech Eng 337 **Proposed:**
3. **Course Title:** **Present:** Atmospheric Science
   Proposed:
   Abbreviated Course Title:
   (24 Spaces or Less. Only needed for New Courses or Title Changes.)
4. **Catalog Description** *(40 Words or Less)*
   Present:

   Proposed:

5. **If course requires field trip check box:** ☐
6. **Credit Hours:** **Present:** **Lecture:** **Lab:** **Total:**
   Proposed: **Lecture:** **Lab:** **Total:**
7. **Prerequisites:**
   Present:

   Proposed:

8. **Required for Majors:** ☐ **Elective for Majors:** ☐
9. **Justification:** This course has not been taught within the past 10 years, and there are no plans to teach it in the near future.

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 _____ (Chair signature) Date: 10/23/09

Recommended by Discipline Specific Curricula Committee _____ (Chair signature) Date: 11-1-09

Approved by Curricula Committee: _____ (Chair signature) Date: _____

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

(Revised 1/31/08)

08/21/09

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CC File # 7876-2009-ME-341-20

Effective Year: 2010
Effective 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 Engineering
2. **Discipline and Course Number:** **Present :** Mech Eng 341 **Proposed:**
3. **Course Title:** **Present:** Experimntl Stress Anal I
   Proposed:
   Abbreviated Course Title:
   (24 Spaces or Less. Only needed for New Courses or Title Changes.)
4. **Catalog Description** *(40 Words or Less)*
   Present:

   Proposed:

5. **If course requires field trip check box:** ☐
6. **Credit Hours:** **Present:** **Lecture:** **Lab:** **Total:**
   Proposed: **Lecture:** **Lab:** **Total:**
7. **Prerequisites:**
   Present:

   Proposed:

8. **Required for Majors:** ☐ **Elective for Majors:** ☐
9. **Justification:** This course has not been taught within the past 10 years, and there are no plans to teach it in the near future.

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 _____ (Chair signature) Date: 10/29/09

Recommended by Discipline Specific Curricula Committee _____ (Chair signature) Date: 11-3-09

Approved by Curricula Committee: _____ (Chair signature) Date: _____

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

(Revised 1/31/08)

08/21/09

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CC File #7877-2009-ME-345-20

Effective Year: 2010
Effective 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 Engineering
2. **Discipline and Course Number:** **Present:** Mech Eng 345 **Proposed:**
3. **Course Title:** **Present:** Non-Intrusive Meas Meth
   Proposed:
   Abbreviated Course Title:
   (24 Spaces or Less. Only needed for New Courses or Title Changes.)
4. **Catalog Description** *(40 Words or Less)*
   Present:

   Proposed:

5. **If course requires field trip check box:** ☐
6. **Credit Hours:** **Present:** **Lecture:** **Lab:** **Total:**
   Proposed: **Lecture:** **Lab:** **Total:**
7. **Prerequisites:**
   Present:

   Proposed:

8. **Required for Majors:** ☐ **Elective for Majors:** ☐
9. **Justification:** This course has not been taught within the past 10 years, and there are no plans to teach it in the near future.

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 _____ (Chair signature) Date: 10/23/09

Recommended by Discipline Specific Curricula Committee _____ (Chair signature) Date: 11-1-09

Approved by Curricula Committee: _____ (Chair signature) Date: _____

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

(Revised 1/31/08)

08/21/09

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CC File # 7878-2009-ME-424-20

Effective Year: 2010
Effective 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 Engineering
2. **Discipline and Course Number:** **Present:** Mech Eng 424 **Proposed:**
3. **Course Title:** **Present:** Theory of Stability II
   Proposed:
   Abbreviated Course Title:
   (24 Spaces or Less. Only needed for New Courses or Title Changes.)
4. **Catalog Description** *(40 Words or Less)*
   Present:

   Proposed:

5. **If course requires field trip check box:** ☐
6. **Credit Hours:** **Present:** **Lecture:** **Lab:** **Total:**
   Proposed: **Lecture:** **Lab:** **Total:**
7. **Prerequisites:**
   Present:

   Proposed:

8. **Required for Majors:** ☐ **Elective for Majors:** ☐
9. **Justification:** This course has not been taught within the past 10 years, and there are no plans to teach it in the near future.

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 _____ (Chair signature) Date: 10/09/09

Recommended by Discipline Specific Curricula Committee _____ (Chair signature) Date: 11-1-09

Approved by Curricula Committee: _____ (Chair signature) Date: _____

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

(Revised 1/31/08)

08/21/09

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CC File # 7879-2009-BioSci-315-32

Effective Year: 2010
Effective 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:** Biological Sciences
2. **Discipline and Course Number:** **Present:** Bio 315 **Proposed:**
3. **Course Title:** **Present:** **Developmental Biology**
   Proposed:
   Abbreviated Course Title:
   (24 Spaces or Less. Only needed for New Courses or Title Changes.)
4. **Catalog Description** *(40 Words or Less)*
   Present:

   Proposed:

5. **If course requires field trip check box:** ☐
6. **Credit Hours:** **Present:** **Lecture:** 3 **Lab:** NA **Total:** 3
   Proposed: **Lecture:** **Lab:** **Total:**
7. **Prerequisites:**
   Present: Bio 115 and Bio 211

   Proposed: Bio 211

8. **Required for Majors:** ☐ **Elective for Majors:** ☒
9. **Justification:** Prerequisites are being modified given changes to our curriculum.

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 _____ (Chair signature) Date: 10/19/07

Recommended by Discipline Specific Curricula Committee Daniel Finke (Chair signature) Date: 11/3/2009

Approved by Curricula Committee: _____ (Chair signature) Date: _____

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

(Revised 1/31/08)

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CC File # 7880-2009-BioSci-345-32

Effective Year: 2010
Effective 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:** Biological Sciences
2. **Discipline and Course Number:** **Present :** Bio 345 **Proposed:**
3. **Course Title:** **Present:** **Comparative Chordate Anatomy**
   Proposed:
   Abbreviated Course Title:
   (24 Spaces or Less. Only needed for New Courses or Title Changes.)
4. **Catalog Description** *(40 Words or Less)*
   Present:

   Proposed:

5. **If course requires field trip check box:** ☐
6. **Credit Hours:** **Present:** **Lecture:** 2 **Lab:** 2 **Total:** 4
   Proposed: **Lecture:** **Lab:** **Total:**
7. **Prerequisites:**
   Present: Bio 110 or 111, and Bio 115 and 116

   Proposed: Bio 113 and Bio 114

8. **Required for Majors:** ☐ **Elective for Majors:** ☒
9. **Justification:** Prerequisites are being modified given changes to our curriculum.

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 _____ (Chair signature) Date: 10/9/09

Recommended by Discipline Specific Curricula Committee _____ (Chair signature) Date: 11/3/2009

Approved by Curricula Committee: _____ (Chair signature) Date: _____

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

(Revised 1/31/08)

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CC File #7881-2009-CER-407-20

Effective Year: 2010
Effective 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:** Materials Science and Engineering
2. **Discipline and Course Number:** **Present:** Cer Eng 407 **Proposed:**
3. **Course Title:** **Present:** Bhvr-Mtls Vi-Mechanical
   Proposed:
   Abbreviated Course Title:
   (24 Spaces or Less. Only needed for New Courses or Title Changes.)
4. **Catalog Description** *(40 Words or Less)*
   Present:

   Proposed:

5. **If course requires field trip check box:** ☐
6. **Credit Hours:** **Present:** **Lecture:** **Lab:** **Total:**
   Proposed: **Lecture:** **Lab:** **Total:**
7. **Prerequisites:**
   Present:

   Proposed:

8. **Required for Majors:** ☐ **Elective for Majors:** ☐
9. **Justification:** This course has not been taught within the past 10 years, and there are no plans to teach it in the near future.

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 _____ (Chair signature) Date: 10/12/09

Recommended by Discipline Specific Curricula Committee _____ (Chair signature) Date: 11-1-09

Approved by Curricula Committee: _____ (Chair signature) Date: _____

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

(Revised 1/31/08)

08/21/09

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CC File # 7882-2009-Met-351-20

Effective Year: 2010
Effective 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:** Materials Science and Engineering
2. **Discipline and Course Number:** **Present:** Met Eng 351 **Proposed:**
3. **Course Title:** **Present:** Min Proc II Flo & Hydro
   Proposed:
   Abbreviated Course Title:
   (24 Spaces or Less. Only needed for New Courses or Title Changes.)
4. **Catalog Description** *(40 Words or Less)*
   Present:

   Proposed:

5. **If course requires field trip check box:** ☐
6. **Credit Hours:** **Present:** **Lecture:** **Lab:** **Total:**
   Proposed: **Lecture:** **Lab:** **Total:**
7. **Prerequisites:**
   Present:

   Proposed:

8. **Required for Majors:** ☐ **Elective for Majors:** ☐
9. **Justification:** This course has not been taught within the past 10 years, and there are no plans to teach it in the near future.

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 Wayne Hueller TH Date: 10/12/09
(Chair signature)

Recommended by Discipline Specific Curricula Committee Jerry A Rawlins Date: 11-1-09
(Chair signature)

Approved by Curricula Committee: _____ Date: _____
(Chair signature)

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

(Revised 1/31/08)

08/21/09

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CC File # 7883-2009-Met-455-20

Effective Year: 2010
Effective 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:** Materials Science and Engineering
2. **Discipline and Course Number:** **Present:** Met Eng 455 **Proposed:**
3. **Course Title:** **Present:** Chemical Metallurgy
   Proposed:
   Abbreviated Course Title: (24 Spaces or Less. Only needed for New Courses or Title Changes.)
4. **Catalog Description** *(40 Words or Less)*
   Present:

   Proposed:

5. **If course requires field trip check box:** ☐
6. **Credit Hours:** **Present:** **Lecture:** **Lab:** **Total:**
   Proposed: **Lecture:** **Lab:** **Total:**
7. **Prerequisites:**
   Present:

   Proposed:

8. **Required for Majors:** ☐ **Elective for Majors:** ☐
9. **Justification:** This course has not been taught within the past 10 years, and there are no plans to teach it in the near future.

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 _____ (Chair signature) Date: 10/12/09

Recommended by Discipline Specific Curricula Committee _____ (Chair signature) Date: 11-1-09

Approved by Curricula Committee: _____ (Chair signature) Date: _____

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

(Revised 1/31/08)

08/21/09

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CC File # 7884-2009-Civ-432-20

Effective Year: 2010
Effective 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:** Civil, Architectural and Environmental Engineering
2. **Discipline and Course Number:** **Present :** Civ Eng 432 **Proposed:**
3. **Course Title:** **Present:** **Turbince-Opn Chnnel Flow**
   Proposed:
   Abbreviated Course Title:
   (24 Spaces or Less. Only needed for New Courses or Title Changes.)
4. **Catalog Description** *(40 Words or Less)*
   Present:

   Proposed:

5. **If course requires field trip check box:** ☐
6. **Credit Hours:** **Present:** **Lecture:** **Lab:** **Total:**
   Proposed: **Lecture:** **Lab:** **Total:**
7. **Prerequisites:**
   Present:

   Proposed:

8. **Required for Majors:** ☐ **Elective for Majors:** ☐
9. **Justification:** This course has not been taught within the past 10 years, and there are no plans to teach it in the near future.

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 _____ (Chair signature) Date: 10/15/09

Recommended by Discipline Specific Curricula Committee _____ (Chair signature) Date: 11-1-09

Approved by Curricula Committee: _____ (Chair signature) Date: _____

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

(Revised 1/31/08)

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CC File # 7885-2009-Civ-466-20

Effective Year: 2010
Effective 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:** Civil, Architectural and Environmental Engineering
2. **Discipline and Course Number:** **Present :** Civ Eng 466 **Proposed:**
3. **Course Title:** **Present:** **Wastewater Treatment II**
   Proposed:
   Abbreviated Course Title:
   (24 Spaces or Less. Only needed for New Courses or Title Changes.)
4. **Catalog Description** *(40 Words or Less)*
   Present:

   Proposed:

5. **If course requires field trip check box:** ☐
6. **Credit Hours:** **Present:** **Lecture:** **Lab:** **Total:**
   Proposed: **Lecture:** **Lab:** **Total:**
7. **Prerequisites:**
   Present:

   Proposed:

8. **Required for Majors:** ☐ **Elective for Majors:** ☐
9. **Justification:** This course has not been taught within the past 10 years, and there are no plans to teach it in the near future.

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 _____ Date: 10/15/09
(Chair signature)

Recommended by Discipline Specific Curricula Committee _____ Date: 11-1-09
(Chair signature)

Approved by Curricula Committee: _____ Date: _____
(Chair signature)

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

(Revised 1/31/08)

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CC File #7886-2009-Civ-491-20

Effective Year: 2010
Effective 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:** Civil, Architectural and Environmental Engineering
2. **Discipline and Course Number:** **Present:** Civ Eng 491 **Proposed:**
3. **Course Title:** **Present:** Internship
   Proposed:
   Abbreviated Course Title:
   (24 Spaces or Less. Only needed for New Courses or Title Changes.)
4. **Catalog Description** *(40 Words or Less)*
   Present:

   Proposed:

5. **If course requires field trip check box:** ☐
6. **Credit Hours:** **Present:** **Lecture:** **Lab:** **Total:**
   Proposed: **Lecture:** **Lab:** **Total:**
7. **Prerequisites:**
   Present:

   Proposed:

8. **Required for Majors:** ☐ **Elective for Majors:** ☐
9. **Justification:** This course has not been taught within the past 10 years, and there are no plans to teach it in the near future.

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 _____ Date: 10/15/09
(Chair signature)

Recommended by Discipline Specific Curricula Committee _____ Date: 11-4-09
(Chair signature)

Approved by Curricula Committee: _____ Date: _____
(Chair signature)

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

(Revised 1/31/08)

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CC File # 7887-2009-Civ-499-20

Effective Year: 2010
Effective 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:** Civil, Architectural and Environmental Engineering
2. **Discipline and Course Number:** **Present :** Civ Eng 499 **Proposed:**
3. **Course Title:** **Present:** **Case Studies in Civ Engr**
   Proposed:
   Abbreviated Course Title:
   (24 Spaces or Less. Only needed for New Courses or Title Changes.)
4. **Catalog Description** *(40 Words or Less)*
   Present:

   Proposed:

5. **If course requires field trip check box:** ☐
6. **Credit Hours:** **Present:** **Lecture:** **Lab:** **Total:**
   Proposed: **Lecture:** **Lab:** **Total:**
7. **Prerequisites:**
   Present:

   Proposed:

8. **Required for Majors:** ☐ **Elective for Majors:** ☐
9. **Justification:** This course has not been taught within the past 10 years, and there are no plans to teach it in the near future.

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 _____ (Chair signature) Date: 10/15/09

Recommended by Discipline Specific Curricula Committee _____ (Chair signature) Date: 11-1-09

Approved by Curricula Committee: _____ (Chair signature) Date: _____

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

(Revised 1/31/08)

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Effective Year: 2011
Effective Term: Summer ☐ Fall ☐ Spring ☒

EC File # 2210-Sp2011-MiEng-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: Mining and Nuclear Engineering

Discipline and Course Number: MI Eng 401

Course Title: Geostatistics

Abbreviated Title *(24 spaces or less)*: Geostatistics

Instructor(s): Kwame Awuah-Offei

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

Prerequisites: Graduate standing or consent

Semester(s) previously taught: None

Brief Course Description: (40 words or less)
Definition of geostatistical data; theory of random fields; autocorrelation and measures of spatial variability including semivariograms, variograms and covariance functions; and spatial prediction and validation. Case studies in mineral resource estimation and environmental pollutant prediction will be presented.

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: 09/23/09

Discipline Specific Curricula Committee: _____ (Chair signature) Date: 10-19-09

Curricula Committee: _____ (Chair Signature) Date: _____

(Revised 1/31/2008)

09/23/09

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Effective Term: ~~FS 2009~~ 2010 **EC File #** 2211-FS 2010-PE-301

Experimental Course Form (EC)

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

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

Filing deadlines for inclusion in the Revised Schedule of Classes are April 30 and October 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.*

School or College:

Department: Geological Sciences and Eng

Discipline and Course Number: PE 301

Course Title: Well Completion Design

Abbreviated Title *(24 spaces or less)*: Well Compltn Desgn

Instructor(s): Shari Dunn-Norman

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

Prerequisites: PE 241

Semester(s) previously taught: Fall 2007; 13 students

Brief Course Description: (40 words or less)
An overview of the hardware, fluids and processes employed in completing oil and gas wells. Examination of types of well completions and their use; influence of well geometry and considerations in designing well completions. Brief overview of sand control, multilaterals and intelligent well completions. Review of completion examples.

List all co-listed courses: Include initials of Dept. Chair(s) and Dean(s) if signatures are not already included below.

1. 4.
2. 5.
3. 6.

Department Chair: _____ Chair Signature **Date:** 9/23/09

College/School Dean: _____ Dean Signature **Date:** 10-19-09

UMR Curricula Committee: _____ Chair Signature **Date:** _____

09/22/09 (Revised 2/14/2002)

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Effective Year: 2010
Effective Term: Summer ☐ Fall ☐ Spring ☒

EC File # 2212-Sp2010-PE-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: Geological Sciences and Engineering

Discipline and Course Number: Pet Eng 401

Course Title: Advanced Well Completion Design

Abbreviated Title *(24 spaces or less)*: Adv Well Compltn Desgn

Instructor(s): S. Dunn-Norman

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

Prerequisites: PE 241

Semester(s) previously taught:

Brief Course Description: (40 words or less)
An overview of the hardware, fluids and processes employed in completing oil and gas wells. Examination of types of well completions and their use; influence of well geometry and considerations in designing well completions. Brief overview of sand control, multilaterals and intelligent well completions. Review of completion examples and exercises with design software.

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: 9/25/09

Discipline Specific Curricula Committee: _____ (Chair signature) Date: 10-19-09

Curricula Committee: _____ (Chair Signature) Date: _____

09/22/09 (Revised 1/31/2008)

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Effective Term: W2010

EC File # 2214-Sp2010-CE-301

Experimental Course Form (EC)

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

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

Filing deadlines for inclusion in the Revised Schedule of Classes are April 30 and October 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.*

School or College: Engineering

Department: Civil, [redacted]

Discipline and Course Number: 301

Course Title: Concrete Pavement Design

Abbreviated Title *(24 spaces or less)*:

Instructor(s): David Richardson

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

Prerequisites: CE 216 with a grade of "C" or better

Semester(s) previously taught: W 2008

Brief Course Description: (40 words or less)
Structural design of rigid pavements including loading characteristics, properties of pavement components, stress distribution, and the effects of climatic variables on design criteria.

List all co-listed courses: Include initials of Dept. Chair(s) and Dean(s) if signatures are not already included below.

1. **4.**

2. **5.**

3. **6.**

Department Chair: _____ (Chair Signature) **Date:** 9/28/09

College/School Dean: _____ (Dean Signature) **Date:** 10-19-09

UMR Curricula Committee: _____ (Chair Signature) **Date:** _____

(Revised 2/14/2002)

09/28/09

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CE 301 COURSE POLICY

1. Grading: Exams (80%), Homework (20)
   Grades: A = 90 to 100%, B = 80 to 89%, C = 70 to 79%, D = 60 to 69%, F - below 60

2. Homework: Due at the beginning of the class on day due. Anytime past that point will be considered late. ***Late homework will be docked 10%. Homework more than 1 day late will be docked 50% and may not be graded.*** After the set is graded, late homework will not be accepted.

3. There is no "extra work" for anyone to improve a grade.

4. There is no "makeup" test to improve a poor grade, or for unexcused absence from a test. In the latter case the grade is zero on the test. Asking faculty to design a special exam just for one person for the student's convenience is unprofessional, at the very least.

5. If anyone misses an examination, or wants to, they are to turn in a neatly written statement as to why it was missed, with any helpful documentation. For example, if an exam is missed for a medical reason, there is very little hope without a statement from a doctor treating you. ***"Working on other projects", "not quite ready", "on an interview trip", "I forgot", "looking for an apartment", "want to leave town early" are typical excuses worth zero on tests.*** You will be told as soon as possible whether the excuse is acceptable.

6. Partial credit is not open to dispute. However, an error in grade computation should be pointed out. Time limit is one week from return of test.

7. As far as the course grade is concerned, it is of no relevance if a test score is, say, 70% because of all silly errors as opposed to conceptual errors. The only thing that counts is that it is 70%. It will not be re-evaluated later on some vague basis of the errors being somehow less significant, and the 70 should be 73, etc. Tests are simply not open for re-evaluation on any basis other than an error in marking a correct answer wrong. After all, differences in mechanical errors vs.

conceptual errors were taken into account in arriving at that numerical grade; so there is nothing left to consider.

8. You are being graded strictly on this course and not on the basis that if you get one letter grade higher you will be allowed to remain in college, etc. That is your problem and all faculty resent any student trying to unload his/her accumulated history of scholastic difficulty on them. We do not "negotiate" grades, as most of you know. Scholastic probation, etc., are irrelevant to my grading procedure. All students are graded strictly on performance. Neither my opinion nor your opinion of what you "really" know, nor personality, nor any other factor is a consideration in your grade.

9. ***Do not schedule events to occur during finals week***, such as interview trips, vacations, job start-ups, marriages, elective surgery, etc. **Don't even ask.** As stated before, a missed exam results in a zero grade. Please inform anyone who may invite you to be in a wedding party that you will not be available on the day of the CE 301 exam. Do this early in the semester.

10. **Attendance policy**: Students are expected to attend class regularly. Attendance will be taken at the ***beginning*** of class. If you are tardy, you will be counted as absent; in this case, you should notify the instructor of your attendance at the end of the period. Any time after that, you will be counted as absent. ***You will lose one letter grade for every 6 unexcused absences*** [excused absences are limited to school-sanctioned activities. All others are unexcused]. You may be dropped from the class if absences become excessive.

11. **Student Academic Dishonesty**. Academic honesty is essential for the intellectual life of the University and for your continued academic and professional development and growth. As your instructor, I have a very high standard for academic honesty in all your work for this class. You as a student in this class have an obligation to adhere to that high standard. ***Should a case of academic dishonesty arise during the course of the semester, I will do the following: I will assign a failing grade to the work in question. I may fail you for the course. And I will refer the incident to both the department Chair and to the Vice Provost for Undergraduate and Graduate***

Studies as required in Section 200.010 of the Collected Rules and Regulations of the University of Missouri.

By enrolling in this course and receiving this syllabus, whether in printed or electronic format, you are certifying knowledge of Sections 200.100 (Standard of Conduct) and 200.020 (Rules of Procedures in Student Conduct Matters) in the Collected Rules and Regulations of the University of Missouri and are pledging to abide by them. If you have not yet read these Sections, please do so. They may be found at the following URL address:
http://www.umsystem.edu/ums/departments/gc/rules/programs/200/.
A more recent site:
http://registrar.mst.edu/academicregs/index.html

An example of academic dishonesty is as follows. ***You must not place in any written assignment, lab report or otherwise, material that has been lifted, scanned, or copied, from any other document (eg other student's work, "files", etc) , except for those specifically approved by the instructor.***

12. Please do not email the instructor asking for your grade at the end of the semester.

13. Disability Support Services: http://dss.mst.edu: If you have a documented disability and anticipate needing accommodations in this course, you are strongly encouraged to meet with me early in the semester. You will need to request that the Disability Services staff send a letter to me verifying your disability and specifying the accommodation you will need before I can arrange your accommodation.

CE 301 CONCRETE PAVEMENT DESIGN

PREREQUISITES: Preceded by CE 216 with a grade of "C" or better

SEMESTER: Winter 2010

TEXT: ***Concrete Pavement Design, Construction, and Performance*** (Delatte)
Course Notes= CN

INSTRUCTOR'S NAME: Dr. David N. Richardson
INSTRUCTOR'S OFFICE: 126 Butler-Carlton Hall
INSTRUCTOR'S PHONE: (573)341-4487
INSTRUCTOR'S e-mail: dnr@mst.edu

PERIOD	TOPIC	READING ASSIGNMENT	HOMEWORK
1-10	**I. INTRODUCTION** A. Design Goals B. Road Tests/Evolution C. Pavement Types D. Performance/Distress E. Surface Characteristics F. Design Period/Pavement Selection G. Environmental Effects	Coursenotes (CN) Ch.1: 1-11; CN Ch.2: 25-29; 37-45;CN CN; Ch.3: 46-62 CN; Ch.3: 62-68 CN CN	 HO HO HO HO HO
	II. SUBGRADES, SUBBASES & BASES A. Subgrade Support 1. Classification 2. Preparation 3. Swelling Soil 4. Frost Action 5. Soil Stabilization	Ch.4: 69-73 Coursenotes Ch.13: 249-252 Coursenotes Ch.4: 73; Ch.13: 252-253 Coursenotes Ch.4: 73-74; Ch.13: 253-254; Coursenotes Ch.4:76-78;Ch.13: 254-255; Coursenotes Ch.4: 74-80; Ch.13: 255-261	
11	B. Subbases & Bases		
	EXAM I		

12-20 21	**III. DESIGN FUNDAMENTALS** 1. Introduction 2. Concrete Materials 3. Design Methods/Theories 4. Traffic 5. Stresses & Deflections 6. Joints 7. Tie bars 8. Dowels 9. Reinforcement 10. Design Features 11. Drainage 12. Typical Sections 13. Specifications **EXAM II**	Ch. 7: 129-130 Ch. 5: 95-110; Ch.6: 111-128 Ch. 7: 140-141; CN Ch. 7: 130-132 Ch. 7: 132-140 Ch. 2: 30-37;Ch.7: 141-148; 150-151 Ch.7: 151-154 Ch.7: 148-149 Coursenotes Ch.9: 194-197; Ch.12: 231-233 Ch.4: 80-94; Ch.9: 189-194 Coursenotes Coursenotes	
22-31	**IV. PCA METHOD** A. Introduction B. Long Method C. Simplified Method D. STREETPAVE **V. AASHTO METHOD** **VI. MEPDG METHOD** **VII. PARKING LOTS** A. Normal Duty B. Industrial **VIII. LIFE-CYCLE COSTS** **IX. CONSTRUCTION** A. Paving B. Temperature Management HIPERPAV C. Acceptance **X. REPAIR/REHABILITATION** **XI. OVERLAYS**	Ch.8: 166-169 Coursenotes Ch.9: 172-189 Ch.9: 175-189; Coursenotes Ch.8: 155-166 Ch.8: 169-171 Coursenotes Ch.11: 221-230;Coursenotes Ch. 9: 180-181; Coursenotes Ch.14: 262-278; Ch.15: 279-287 Ch.14: 287-298 Ch.14: 299-305 Ch 16: 306-314 Ch: 17: 315-329 Ch. 18: 330-350	
FINALS WEEK	**REVIEW** **EXAM III**		

Effective Year: 2010
Effective Term: Summer ☐ Fall ☐ Spring ☒

EC File # 2215-Sp2010-CE-301

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[redacted]h301

Course Title: Structural Dynamics

Abbreviated Title *(24 spaces or less)*: Structural Dynamics

Instructor(s): Genda Chen

Credit Hours: **Lecture:** 3.0 **Lab:** **Total:**

Prerequisites: IDE150, CE/Arch217

Semester(s) previously taught: WS08

Brief Course Description: (40 words or less)
This course presents the fundamental concepts in structural dynamics and force distribution in structures under dynamic loads. Specifically, the natural frequency and mode shape of structural systems are investigated. The response and behavior of structural components and systems are studied under machine-induced, blast, wind and earthquake excitations. Both hand calculations and computer methods for the analysis of lumped and distributed mass models are developed.

List all co-listed courses: Include initials of Dept. Chair, if signature is not already included below.
1) [redacted] **2)** CE301 **3)**

4) **5)** **6)**

Department Chair: _____ (Chair Signature) Date: 9/29/09

Discipline Specific Curricula Committee: _____ (Chair signature) Date: 10-19-09

Curricula Committee: _____ (Chair Signature) Date: _____

09/18/09 (Revised 1/31/2008)

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CE/ArchE301 STRUCTURAL DYNAMICS
Winter Semester 2010

Instructor: Genda Chen, Ph.D., P.E., F. ASCE

Office: Butler-Carlton Hall, Room 328

Class Schedule: MW 3:00 p.m. – 4:15 p.m. in CE317

Office Hours: MW, 1:00 p.m. – 3:00 p.m.
4:15 p.m. – 5:30 p.m.

Textbook:
Anil K. Chopra, Dynamics of Structures: Theory and Applications to Earthquake Engineering.

Grading:			
	Quizzes (2)	50%	(see Quizzes below)
	Homework	20%	
	Final exam	30%	

Quizzes: Two quizzes will be given during the semester. If a quiz has to be missed for a valid reason ("on the interview trip" is NOT a valid reason), approval from instructor must be obtained in advance. If approved, students will be given an opportunity to take one comprehensive exam during the final exam week for one missing quiz.

Homework: Assigned problems will be worked in pencil on 8 ½ x 11 in. engineering paper on one side of the sheet, with each problem starting on a new page or with one inch spacing between problems. The presentation will include a statement of the problem, a neat sketch (optional), and an orderly presentation of the solution. Assigned problems will be collected.

Attendance Policy: Any students with three or more absences without a valid reason may be asked to drop out of the class.

Objectives:

This course presents the fundamental concepts in structural dynamics and the force distribution in structures under dynamic loads. Specially, the natural frequency and mode shape of structural systems are investigated. The response and behavior of structural components and systems are studied under machine-induced, blast, wind and earthquake excitations. Both hand calculations and computer methods for the response analysis of lumped and distributed mass models are developed.

On completion of this course, students should be able to:

1. Explain the resonance and beating phenomena as well as the role of damping and inertia in structural dynamics.
2. Formulate the equation of motion of a discrete or distributed structural system

3. Understand and identify the dynamic properties of a discrete or distributed structural system.
4. Apply various techniques to solve for the frequencies and mode shapes of structures.
5. Determine the responses of simple and complex structures under dynamic loads by modal and Ritz-vector analysis.
6. Formulate the damping matrix and apply it in the elastic analysis of structural responses.

Tentative Topics:

1. Introduction and application of structural dynamics theory in design
2. Dynamic properties and equation of motion
3. Resonance and beating phenomena
4. Undamped response of simple structures (one degree of freedom)
5. Damped response of simple structures
6. Effects of various dynamic loads
7. Identification of simple structures
8. Natural frequency and mode shapes of complex structures (multiple degree of freedom)
9. Modal analysis of complex structures
10. Damping matrix formulation
11. Numerical solution of structural responses
12. Ritz vector and Rayleigh-Ritz analysis
13. Formulation of the equation of motion of consistent mass systems
14. Boundary condition and mode shapes of consistent mass systems
15. Discretization of distributed structural systems and accuracy
16. Computer model and analysis

Prerequisites: CE/ArchE217 and BE150 or equivalent.

Effective Year: 2010
Effective Term: Summer ☐ Fall ☐ Spring ☒

EC File # 2216-Sp2010-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: Special Concretes

Abbreviated Title *(24 spaces or less)*: Special Concretes

Instructor(s): Prof. John J. Myers

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)
Material and structural behavior of special concretes. Optimization of cementitious based systems. Evaluation and NDE/T aspects of concrete.

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: 9/28/09

Discipline Specific Curricula Committee: _____ (Chair signature) Date: 10-19-09

Curricula Committee: _____ (Chair Signature) Date: _____

09/28/09 (Revised 1/31/2008)

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Missouri University of Science and Technology

Department of Civil, Architectural, and Environmental Engineering

CE 401 – Special Concretes – Spring 2010

INSTRUCTOR
Dr. John J. Myers, P.E.
Associate Professor
325 Butler-Carlton CE Hall
1401 North Pine Street
Office Phone: 341-6618
Office Fax: 341-4729
Email: jmyers@mst.edu

CLASS MEETING: MW 2:00pmm-3:15pm **ROOM:** CE 317 (To Be Verified)
ADDITIONAL MEETING TIME: As Required – Arranged by Instructor
OFFICE HOURS: MTWR 8:30am-9:15am; or by appointment, 325 Butler Carlton Hall

COURSE DESCRIPTION:
Special Concretes – Material and structural behavior of special concretes. Optimization of cementitious based systems. Evaluation and NDE/T aspects of concrete. ***Required Prerequisites***: Consent of the Instructor with Graduate Standing.

TEXTBOOKS AND REFERENCE MATERIALS
Textbooks: There are **no required** textbooks for this course, but numerous references will be provided by the instructor. The following is some reference materials available at the library that will provide some background literature.

1. American Concrete Institute Building Code Requirements for Structural Concrete (ACI 318-08) and Commentary (ACI 318R-08).
2. Concrete, Second Edition, by S. Mindness, J.F. Young and D. Darwin, Prentice Hall, 2002, 644 pp, ISBN 0-13-064632-6.
3. Prestressed Concrete: A Fundamental Approach, Fifth Edition, by Edward G. Nawy, Prentice Hall, 2006, 945 pp. ISBN 0-13-149759-6.
4. Reinforced Concrete: Mechanics and Design, Fourth Edition, by J.G. MacGregor and J.K. Wight, Prentice Hall, 2005, 1132 pp. ISBN 0-13-142994-9.
5. Advanced Scanning Electron Microscopy and X-Ray Microanalysis, by D.E. Newberry, D.C. Joy, P. Echlin, C.E. Fiori, and J.I. Goldstein. ISBN 0-306-421-40-2.
6. Portland Cement Association Concrete Technical Support Library, CD019.02, PCA, 2003.
7. Handouts provided by the Instructor.

COURSE OUTLINE:

Lectures:
The lectures will introduce specialized topics affiliated with concrete. This includes concrete specifications, optimization, specialized concretes [modified density, fiber reinforced concrete, high strength concrete, ultra-high strength concrete, self-consolidating concrete (NS and HS), polymer / polymer modified concrete, environmentally sensitive cementitious-based materials, self-healing / damage detection materials, rapid set-rapid patching materials], statistical data analysis processes, structural implications associated with material developments, and evaluation / NDT/E aspects of concrete.

Additional Class Meeting:
The *Additional Meeting Time* will be assigned as designated by the instructor for any lab affiliated activities.

Class Attendance:
Class attendance is **required** and will be monitored by the instructor. If an emergency arises in which you cannot attend class, please notify the instructor ahead of time, by email or phone, such that arrangements can be made for any missed handouts or homework assignments.

Assignments:
Assignments will be assigned throughout the semester and collected as designated by the instructor. Assignments must be neat and organized. ***Homework assignments will be due as announced by the instructor when assigned.*** Late homework will be accepted with a 20% penalty for each class meeting past due unless a late submission is approved by the instructor in advance.

Report Assignments / Term Project:
Several report assignments and a term project and presentation will be assigned during the semester. Final submission and presentation of the term project will be due **on a date specified by the instructor when the project description is presented in class.**

Examinations:
A mid-term exam will be given during a scheduled period. A final will be given at the end of the semester. Missed exams will count as zero. Exams cannot be made up except under very unusual circumstances approved prior to the scheduled exam date by the instructor.

Grading System:
Grades will be based on the performance of exams, assigned homework, and term project, as follows:

Assignments	20%
Term Project	20%
Oral Presentation	10%
Mid-term Exam	25%
Final	25%

Grading Scale: $A \geq 90$
$80 \leq B < 90$
$70 \leq C < 80$
$60 \leq D < 70$
$F < 60$
Note: Cutoffs may be slightly lower, but will **not** be higher.

Academic Dishonesty:
Academic honesty is essential for the intellectual life of the University and for your continued academic and professional development and growth. As your instructor, I have a very high standard of academic honesty in all of your work in this class. You as a student in this class have an obligation to adhere to that high standard. Should a case of academic dishonesty arise during the course of this semester, I as the instructor shall make an academic judgment regarding your grade on the work in question and in this course if necessary. By enrolling in this course and receiving this syllabus, whether in printed or electronic format, you are certifying knowledge of Sections 200.010 (Standard of Conduct) and 200.020 (Rules of Procedures in Student Conduct Matters) in the Collected Rules and Regulations of the University of Missouri and are pledging to abide by them. If you have not yet read these Sections of the Collected Rules and Regulations, please do so immediately after class

or at the next opportunity your schedule allows. They may be found at the following URL address: http://www.umsystem.edu/ums/departments/gc/rules/programs/200/.

Educational Environment:
It is very important to the Instructor that each student has a healthy productive learning environment. If any student feels their learning environment is being restricted by another individual, please feel free to discuss this with the Instructor.

Important Dates:

MLK HOLIDAY	Monday, Jan. 19
Last day to change HEARER status:	Monday, Feb. 23
Last day to drop without a 'WD' showing on transcript:	Monday, Feb. 23
Last day to add course:	Monday, Feb. 23
Spring Recess	*Thur. Mar. 12 – Sun. March 15*
Spring Break	*Mon. Mar. 23 – Sun. March 29*
Mid-semester:	Saturday, March 7
Last day for dropping a course:	Friday, April 17
Last class day:	Friday, May 8

BEST WISHES FOR A SUCCESSFUL SEMESTER

CE 401 – Special Concretes Course Topics

	COURSE TOPICS TO BE COVERED	
	MATERIAL ASPECTS	
1.	**Overview of Concrete and Concrete Specifications**	
2.	**Evaluation of Concrete Performance: Techniques and Methods**	
3.	**Optimization of Concrete Materials** ➢ Basic Fundamentals and Techniques ➢ Conventional Techniques: NSC and HSC ➢ Particle Packing Models (development and implementation)	**RA**
4.	**Modified Density Concretes**	
5.	**Fiber Reinforced Concrete**	
6.	**High Strength Concrete**	
7.	**Ultra-High Strength Concrete**	
8.	**Self Consolidating Concrete** (Normal Strength and High Strength)	
8.	**Polymer Concrete**	
9.	**Polymer Modified Concrete**	
10.	**Environmentally Sensitive (Sustainable) Cementitious Materials**	
11.	**Concrete with Self-Healing / Damage Detection Materials**	
12.	**Rapid Set Concretes including Rapid Patching Materials**	
13.	**Statistical Data Analysis and Characterization of Research Generated Data**	**RA**
	STRUCTURAL ASPECTS	
14.	**Structural Implications of Material Advances on Design and Analysis**	
15.	**Modeling Aspects of Special Concretes** ➢ HSC, UHSC, FRC	**RA**
16.	**Case Studies**	
	EVALUATION AND NDT/E ASPECTS OF CONCRETE	
17.	**Non Destructive Testing and Evaluation Techniques for Concrete**	
18.	**Evaluation, Materials, and Techniques for Concrete Repair** - Causes of distress, evaluation methods, repair materials, repair techniques, and quality control methods for repair of concrete.	
19.	**Petrographic Examination of Concrete** ➢ SEM Techniques and Imaging Systems ➢ Sampling, Specimen Preparation, ASTM Test Methods, Interpretation of Results ➢ NIH Imaging Software Application	**Lab as arranged**

RA – expected Report Assignment (assigned in addition to homework assignments).

Effective Year: 2010
Effective Term: Summer ☐ Fall ☐ Spring ☒

EC File # 2219-Sp2010-Engt-30

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: Engineering Management & Systems Engineering

Discipline and Course Number: ENG MGT 301

Course Title: New Product Design

Abbreviated Title *(24 spaces or less)*: New Product Design

Instructor(s): Katie Grantham Lough

Credit Hours: **Lecture:** 2.0 **Lab:** 1.0 **Total:** 3.0

Prerequisites: none

Semester(s) previously taught:

Brief Course Description: (40 words or less)
Students use physical modeling to characterize a team-based inter-disciplinary design project. A prototype is built and tested to determine the effectiveness of the various modeling techniques used.

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: 09/30/09

Discipline Specific Curricula Committee: _____ (Chair signature) Date: 10-19-09

Curricula Committee: _____ (Chair Signature) Date: _____

09/29/09 (Revised 1/31/2008)

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Effective Year: 2010
Effective Term: Summer ☐ Fall ☐ Spring ☒

EC File # 2220-Sp2010-NE-4L

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: Mining and Nuclear Engineering

Discipline and Course Number: NE401 [redacted]1

Course Title: Nuclear Medical Science

Abbreviated Title *(24 spaces or less)*: Nuclear medical Science

Instructor(s): Hyoung Koo Lee & Bijaya Shrestha

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

Prerequisites: NE312, Nuclear Radiation Measurement and Spectroscopy or equivalent

Semester(s) previously taught: None

Brief Course Description: (40 words or less)
Physics and technologies involved in various radiological imaging or treatment systems in the medical field, such as digital radiography, digital mammography, computed tomography, digital image processing, feature extraction, and nuclear medicine instruments will be covered .

List all co-listed courses: Include initials of Dept. Chair, if signature is not already included below.
1) EE 401 JLJE 2) 3)

4) 5) 6)

Department Chair: Arvind Kumar (Chair Signature) Date: 9-29-09

Discipline Specific Curricula Committee: [signature] (Chair signature) Date: 10-19-09

Curricula Committee: _____ (Chair Signature) Date: _____

09/29/09 (Revised 1/31/2008)

Effective Year: 2010
Effective Term: Summer ☐ Fall ☐ Spring ☒

EC File # 2222-Sp2010-AE-301

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: MAE

Discipline and Course Number: AE 301

Course Title: Plasma Physics I

Abbreviated Title *(24 spaces or less)*: Plasma Physics I

Instructor(s): Joshua L. Rovey

Credit Hours: **Lecture:** 3.0 **Lab:** **Total:** 3.0

Prerequisites: AE/ME 231 or Physics 221 or Nuc Eng 221

Semester(s) previously taught: None

Brief Course Description: (40 words or less)
Single particle orbits in electric and magnetic fields, moments of Boltzmann equation and introduction to fluid theory. Wave phenomena in plasmas. Diffusion of plasma in electric and magnetic fields. Analysis of laboratory plasmas and magnetic confinement devices. Introduction to plasma kinetic theory.

List all co-listed courses: Include initials of Dept. Chair, if signature is not already included below.
1) ME 301 JKN **2)** NucE 301 **3)** Phys 301

4) **5)** **6)**

Department Chair: _____ (Chair Signature) Date: 10/6/09

Discipline Specific Curricula Committee: _____ (Chair signature) Date: 10-19-09

Curricula Committee: _____ (Chair Signature) Date: _____

10/06/09

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AE/ME/Phys/NucE 301
Plasma Physics I
Spring 2010
3 Credit Hours

Instructor: J.L. Rovey, 292D Toomey Hall, Phone: 341-4613, email: roveyj@mst.edu
Class Time and Location: TBD
Office hours: TBD
Pre-requisite: AE/ME 231 or Physics 221 or Nuc Eng 221

This is a Note-Intensive Class!
YOU are responsible for attending class and taking notes.

Required Text: Introduction to Plasma Physics and Controlled Fusion, Chen, Plenum Press, 1984.

Other useful References: Principles of Plasma Discharges and Materials Processing, 2nd Edition, Lieberman & Lichtenberg, John Wiley & Sons, 2005. Introduction to Physical Gas Dynamics, Vincenti & Kruger, Krieger Publishing, 1967. Plasma Physics for Nuclear Fusion, Miyamoto, MIT Press, 1980.

Course Goals:
1) Cover the basics of electromagnetism, gaskinetic theory, and plasma physics.
2) Familiarize you with different applications and areas where plasma physics is important.
3) Prepare you for industrial or graduate research work in the field of plasma physics.

Course Objectives: By the end of this course you should be able to
1) Demonstrate a working knowledge of electrostatics, electromagnetics, and charged particle motion.
2) Demonstrate a fundamental understanding of Debye lengths, cross-sections, collisions, velocity distributions, and adiabatic invariants.
3) Describe the different modes and mechanisms whereby waves influence and drive a plasma discharge.
4) Interpret a plasma probe diagnostic characteristic for different probe diagnostics used to interrogate plasmas

Grading:
A 90% and above
B 80 - 89 %
C 70 - 79 %
F below 70%

Weighting:

Mid-term	30%
Homework (~ 6 HW assignments)	20%
Final Exam	50%

There are NO make-up exams. The final exam is cumulative (it covers everything).
Homework will be due at the beginning of class.
Late Homework will NOT be accepted.
If I cannot read it, I will not grade it. This applies to both homework & exams.

Communication:
Please check your email daily. I also plan to use Blackboard to post HW, handouts, announcements, etc.

Academic Dishonesty: http://registrar.mst.edu/academicregs/index.html
Page 30 of the Student Academic Regulations handbook describes the student standard of conduct relative to the System's Collected Rules and Regulations section 200.010, and offers descriptions of academic dishonesty including cheating, plagiarism or sabotage. These rules apply!

Other Information:
If you have a documented disability and anticipate needing accommodations in this course, you are strongly encouraged to meet with me early in the semester. You will need to request that the Disability Services staff send a letter to me verifying your disability and specifying the accommodation you will need before I can arrange your accommodation.

AE/ME/NucE/Phys 301 Plasma Physics I

I. Introduction (1 lecture)
- A. What is a plasma?
- B. What is it good for?
- C. Course Outline

II. Single Particle Motions (7 lectures)
- A. Uniform E&B fields
- B. Non-uniform E&B fields
- C. Time varying E&B fields
- D. Adiabatic Invariant
- E. Summary

III. Plasma Fluid (7 lectures)
- A. Introduction
- B. Fluid equation of motion
- C. Drifts perpendicular to B
- D. Drifts parallel to B
- E. Plasma approximation

IV. Waves in Plasmas (7 lectures)
- A. Plasma oscillations
- B. Ion waves
- C. Electrostatic waves
- D. Electromagnetic waves
- E. Cutoff and resonances
- F. CMA diagram

V. Diffusion & Resistivity (5 lectures)
- A. Diffusion & Mobility in Weakly ionized gas
- B. Diffusion across a magnetic field
- C. Single-fluid MHD Equations
- D. Bohm diffusion

VI. Equilibrium & Stability (6 lectures)
- A. Concept of Beta
- B. Diffusion of Magnetic field into plasma
- C. Two-stream instability
- D. Gravitational instability
- E. Weibel instability

VII. Kinetic Theory (4 lectures)
- A. Distribution function
- B. Equations of Kinetic Theory
- C. Landau damping

VIII. Nonlinear Effects (1 lectures)
- A. Sheaths

IX. Applications (4 lectures)
- A. Space Propulsion
- B. Fusion
- C. Astrophysics
- D. Materials Processing

EC File #2223-Sp2010-BioSci-401

Effective Year: 2010
Effective Term: Summer ☐ Fall ☐ Spring ☒

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: Biological Sciences

Discipline and Course Number: Bio 401

Course Title: Special Topics: Advanced Nanobiotechnology

Abbreviated Title *(24 spaces or less)*: Adv. Nanobiotechnology

Instructor(s): Yue-wern Huang

Credit Hours: **Lecture:** 2 **Lab:** 0 **Total:** 2

Prerequisites: Bio 211 and Bio 231 and graduate standing

Semester(s) previously taught: 0

Brief Course Description: (40 words or less)
Nanotechnology has emerged to change human economy and society in many aspects. Applications of nanotechnology in life science is termed nanobiotechnology. This graduate course describes recent development of nanobiotechnology and includes discussions of recent papers.

SCIENCE

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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: 10/18/09
(Chair Signature)

Discipline Specific Curricula Committee: _____ Date: 11/3/2009
(Chair signature)

Curricula Committee: _____ Date: _____
(Chair Signature)

(Revised 1/31/2008)

10/19/09

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Effective Term: Sp 2010 EC File # 2224-Sp2010-Tech Com-401

Experimental Course Form (EC)

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

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

Filing deadlines for inclusion in the Revised Schedule of Classes are April 30 and October 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.*

School or College: [redacted]

Department: ENGL/TCH COM

Discipline and Course Number: TCH COM 401

Course Title: Special Topics: Web-Based Communication

Abbreviated Title *(24 spaces or less)*: Web-Based Communication

Instructor(s): Dr. David Wright

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

Prerequisites: none

Semester(s) previously taught: Spring 2008

Brief Course Description: (40 words or less)
A study of selected tools, strategies, and genres used to communicate via the World Wide Web. Emphasis on the communication of technical information.

List all co-listed courses: Include initials of Dept. Chair(s) and Dean(s) if signatures are not already included below.

1. 4.
2. 5.
3. 6.

Department Chair: _____ (Chair Signature) **Date:** 10/16/09

College/School Dean: _____ (Dean Signature) **Date:** Oct. 16, 2009

UMR Curricula Committee: _____ (Chair Signature) **Date:** _____

10/16/09 (Revised 2/14/2002)