MISSOURI S&T

MISSOURI UNIVERSITY OF SCIENCE AND TECHNOLOGY

Formerly University of Missouri-Rolla

Agenda
Campus Curricula Committee Meeting
September 1, 2009 Meeting
3:00 p.m. Room 117 Fulton Hall

Approval of May 5, 2009 minutes.

Review of submitted DC forms:
DC 0327, Interdisciplinary Engineering, effective Fall 2009.
A proposal to inactivate the Bachelor of Science degree in Interdisciplinary Engineering.

DC0328, Mining Engineering, effective Fall 2009.
A proposal to modify the current curriculum for the BS in Mining Engineering.

DC0329, Finance, effective Fall 2009.
A proposal to remove Econ 323 from the Finance minor.

DC0331, Cognitive Neuroscience, effective Spring 2010.
A proposal to modify the current requirements for the minor in Cognitive Neuroscience by requiring Psych 345.

DC0333, Business and Management Systems, effective Fall 2010.
A proposal to modify the current curriculum for the BS in Business and Management Systems.

DC0335, Information Science and Technology, effective Fall 2010.
A proposal to modify the current curriculum for the MS in Information Science and Technology.

DC 0336, Arts, Languages & Philosophy, effective Spring 2010.
A proposal to create a new minor called Studio Art Minor.

Review of submitted CC forms:
CC 7689, Mining Engineering 221, Mining Exploration, effective Fall 2009.

CC 7690, Mining Engineering 225, Surface Mine Design, effective Fall 2009.

CC 7691, Mining Engineering 235, Underground Mine Design, effective Fall 2009.

Office of the Registrar • 103 Parker Hall • 300 West 13th Street • Rolla, MO 65409-0930
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CC 7692, Mining Engineering 324, Underground Mining Methods and Equipment, effective Fall 2010.

CC 7693, Mining Engineering 326, Surface Mining Methods and Equipment, effective Spring 2010.

CC 7694, Mining Engineering 331, Rock Mechanics I, effective Fall 2009.

CC7695, Mining Engineering 332, Soils and Overburden Materials for Mining Engineering, effective Fall 2009.

CC 7696, Mining Engineering 392, Mine Design Project I, effective Fall 2009.

CC 7697, Mining Engineering 393, Mine Planning and Design, effective Fall 2009.

CC 7700, Arts, Languages & Philosophy 111, Global Village, effective Fall 2009.

CC 7701, Technical Communication 433, Proposal Writing, effective Fall 2009.

CC 7702, Psychology 345, Evolutionary Psychology, effective Fall 2009.

CC 7705, Computer Science 378, Introduction to Neural Networks & Applications, effective Fall 2009.

CC 7708, Computer Science 462, Advanced Network Security, effective Spring 2010.

CC 7712, IST 336, Foundations of Internet Computing, effective Fall 2010.

CC 7713, IST 461, Information Systems Project Management, effective Fall 2010.

CC 7714, M&IS 397, Capstone Seminar in Management and Information Systems, effective Spring 2010.

CC 7715, M&IS 101, Special Topics, effective Spring 2010.

CC 7717, Art 30, Drawing II, effective Spring 2010.

CC 7718, Art 50, Painting II, effective Spring 2010.

CC 7726, Biological Sciences 358, Advanced Biodiversity, effective Spring 2010.

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Review of submitted EC forms:
EC 2182, Business 301, Accounting and Finance Essentials, effective Spring 2010.

EC 2183, Business 301, Management, Marketing and Business Law Essentials, effective Spring 2010.

EC 2184, Business 301, Operations Management and Management Information Systems Essentials, effective Spring 2010.

EC 2187, History 301, Making of Modern Germany, effective Spring 2010.

EC 2188, Biological Sciences 301, Pharmacology, effective Spring 2010.

EC 2189, Biological Sciences 301, Nanobiotechnology, effective Spring 2010.

EC 2191, Marketing 301, Integrated Marketing Communications, effective Fall 2009.

EC 2192, IST 301, Advanced Networking, effective Fall 2009.

EC 2195, History 301, Mark Twain's America, effective Spring 2010.

EC 2199, Biological Sciences 301, Genomics, effective Spring 2010.

Tabled Items:
CC 7635, ERP 442, Customer Relationship Management in an ERP Environment.
Tabled.
Catalog Description: This course emphasizes identification (targeting), acquisition, retention, and development (expansion of (profitable) customers. It also covers effective and efficient management of customers, using information technology. The SAP CRM and SAS BI tools are used to enhance student education with real world applications.
Credit Hours: 3 hour lecture
Prerequisites: ERP 345

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Effective Year: 2009
Effective Term: Summer ☐ **Fall** ☒ **Spring** ☐
(Creating or modifying a degree program must be effective for a Fall term)

DC # 0327-2009-IDE-000-00

Degree Change Form (DC)

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

Title of degree program, emphasis area, or minor:

Interdisciplinary Engineering, BS

Department: Interdisciplinary Engineering

Briefly describe action requested (Attach documentation as appropriate):

Place program on "Inactive Status". Enrollment goals in this program were not realized.

Recommended by Department: _____ Date: 4/6/09
(Chair signature)

Recommended by Discipline Specific Curricula Committee: _____ Date: 4-9-09
(Chair signature)

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

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

04/01/09

(Revised 1/31/2008)

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Form PC

PROGRAM CHANGE FORM

1. Submitted by: Missouri University of Science and Technology
Name of Institution (Campus or off-campus residential center in the case of multi-campus institutions)

2. Type of Program Change (Check those that apply):

_____ Title change only
_____ Combination program created out of closely allied existing programs
_____ Option(s) added to existing program(s)
_____ Addition of certificate program developed from approved existing parent degree
_____ Addition of free-standing single-semester certificate program
_____ Delete program(s)
_____ Delete option(s)
__X__ Program placed on "Inactive Status" list

3. Indicate Program Change or Addition of Options:

Before the Proposed Change			After the Proposed Change		
Title of Old Program or Certificate Option	Degree	CIP Code	Title of New Program or Certificate Option	Degree	CIP Code
Interdisciplinary Engineering	BS	140101	Interdisciplinary Engineering	BS	140101

4. Attach a copy of the "before and after" curriculum, as applicable, and a rationale for the proposed change.
The department has been eliminated - therefore, the degree will be phased out.

5. Intended date of program change, additional options, or "Inactive Status":

August/2009 (Fall Semester 2009)
Month/Year

AUTHORIZATION

Warren K. Wray — Provost 4/8/09
Name/Title of Institutional Officer Signature Date

Dr. William Schonberg, 341-4787
Person to Contact for More Information Telephone Number

DC # 0328-2009-MiEng-00-00

Effective Year: 2009
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 Degree in Mining Engineering

Department: Mining and Nuclear Engineering

Briefly describe action requested (Attach documentation as appropriate):
Department seeks approval by the appropriate Campus Committees for the proposed curriculum for the B.S. degree in Mining Engineering effective Fall 2009. The curriculum changes resulted from the periodic program quality audit by faculty, consultations with the program constituencies (students, faculty, industry, alumni and the Academy) and the 2008-2009 ABET Review process.

Recommended by Department: _____ (Chair signature) Date: 04/21/09

Recommended by Discipline Specific Curricula Committee: _____ (Chair signature) Date: 6-1-09

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

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

(Revised 1/31/2008)

04/21/09

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MISSOURI S&T MINING ENGINEERING CURRICULUM

Student Name _____ 128 Credit Hours (01/19/09)

FRESHMAN YEAR

First Semester	Credit	Second Semester	Credit
Chem 001 General Chemistry I	4	Math 015 Calculus for Engineers II	4
Chem 002 General Chemistry I Lab	1	Physics 023-Engineering Physics I	4
Chem 004 Lab Safety	1	IDE 020 Engineering Design w Comp Appl	3
Math 014 Calculus for Engineers I	4	*MI Eng 003 Principles of Mining Engineering*	1
FE 010 Study & Careers in Engineering	1	Mi Eng 151-Introduction to Mining Safety	1
English 20 Exposition and Argumentation	3	Ge Eng 050-Geology for Engineers	3
History 112, 175, 176 or Political Science 90	3		
TOTAL	**17**	**TOTAL**	**16**

SOPHOMORE YEAR

First Semester	Credit	Second Semester	Credit
Mi Eng 110 Surveying for Mineral Engineers	2	Geo 125 Physical Mineralogy and Petrology	3
Mi Eng 215 Materials Handling in Mines	3	Physics 024 Engineering Physics II	4
Econ 121 Principles of Micro-Economics; or Econ 122 Principles of Macro-Economics	3	IDE 140 Statics and Dynamics	3
Math 022 Calculus and Analytic Geometry III	4	Math 204 Elementary Differential Equations	3
Geo 220 Structural Geology	4	Mi Eng 235 Underground Mine Design	3
Mi Eng 225 Surface Mine Design	3		
TOTAL	**19**	**TOTAL**	**16**

JUNIOR YEAR

First Semester	Credit	Second Semester	Credit
Mi Eng 221 Mining Exploration	3	Mi Eng 241 Principles of Mineral Processing	3
Civ E 230 Elementary Fluid Mechanics	3	MI Eng 318 Mine Atmospheric Control	3
English 065-Tech Writer in Bus & Industry	3	Mi Eng 324 U/G Mining Methods & Equipment	3
Stat 213 Applied Engineering Statistics	3	Mi Eng 326 Surface Mining Methods & Equipment	3
HSS Elective	3	Mi Eng 331 Rock Mechanics	3
		HSS Elective	3
TOTAL	**15**	**TOTAL**	**18**

SENIOR YEAR

First Semester	Credit	Second Semester	Credit
Mi Eng 307 Principles of Explosives Engineering	3	Mi Eng 376 Environmental Aspects of Mining	3
Mi Eng 317 Mine Power and Drainage	3	*Mi Eng 393 Mine Design Project II*	4
MI Eng 322 Mine Management	2	Technical Elective	3
Mi Eng 332 Soils and Overburden Materials	2	HSS Elective	3
Mi Eng 392 Mine Design Project I	1		
Technical Elective	3		
TOTAL	**14**	**TOTAL**	**13**

1. The curriculum contains a total of 21 general education credit hours. The three HSS electives must be from the approved list with at least one course (3 or more hours) that builds on depth and at least one course (3 or more hours) that focuses on the economics of a large enterprise, such as the mining industry, e.g. Econ 340 or Econ 345. The latter also satisfies the depth requirement.
2. ***Explosives Engineering Emphasis:*** Mi Eng 350 (Blasting Tech) and either MI Eng 301, 390 (Special Topics and Mining Research, both in an explosives area), Ge Eng 371 (Rock Engineering) or Mi Eng 383 (Tunneling/Construction) have to be taken as Technical Electives.
3. ***Quarrying Engineering Emphasis:*** Cv Eng 216 (Construction Materials) and Mi Eng 304 (Advanced Aggregate and Quarrying) have to be taken as Technical Electives.
4. ***Coal Emphasis:*** Mi Eng 343 (Coal Mine Development and Production), Mi Eng 311 (Mine Plant Management) or an approved substitute course has to be taken as Technical Electives.
5. ***Mining and Environment Emphasis:*** Geol Eng 235 (Environmental Geosciences), Geol Eng 333 (Risk Assessment in Environmental Studies), or approved substitute courses have to be taken as Technical Electives.
6. ***Mining Health and Safety Emphasis:*** Mi Eng 202 (Mine Rescue), Eng Mgt 311 (Human Factors), or other approved substitute courses have to be taken as Technical Electives.
7. ***Sustainable Development Emphasis:*** Pol Sci 315 (Public Policy Analysis), Econ 340 (Environmental and Natural Resource Economics), or other approved substitute courses have to be taken as Technical Electives.
8. Mining courses in *italics* are offered every semester.

Huffman, Angie L.

From: Bayless, Jerry R.
Sent: Monday, May 04, 2009 2:54 PM
To: Frimpong, Samuel
Cc: Book, Neil L.; Watkins, Steve E.; Grasman, Scott E.; Anderson, Neil L.; Bachman, Bonnie; Schlesinger, Mark E.; Nisbett, J. Keith; Mueller, Gary Edward; Huffman, Angie L.
Subject: Mining Engr Curriculum Changes

The Engineering DSCC has voted not to approve the curriculum changes for Mining Engineering curriculum changes recently submitted. The amni issue is the use of two Mining Engineering courses for general education courses. I will return the forms without our approval the the Regiatrar's Office.

Jerry

Jerry R. Bayless, PE
Associate Professor
Civil, Architectural and Environmental Engineering
Missouri University of Science and Technology
332 Butler Carlton Civil Engineering Hall
1401 North Pine Street
Rolla, MO 65409
(573) 341-4150
Fax: (573)341- 4729

MISSOURI S&T MINING ENGINEERING CURRICULUM

Student Name _____ 128 Credit Hours (01/19/09)

FRESHMAN YEAR

First Semester	Credit	Second Semester	Credit
Chem 001 General Chemistry I	4	Math 015 Calculus for Engineers II	4
Chem 002 General Chemistry I Lab	1	Physics 023-Engineering Physics I	4
Chem 004 Lab Safety	1	IDE 020 Engineering Design w Comp Appl	3
Math 014 Calculus for Engineers I	4	*Mi Eng 003 Principles of Mining Engineering*	1
FE 010 Study & Careers in Engineering	1	Mi Eng 151-Introduction to Mining Safety	1
English 20 Exposition and Argumentation	3	Ge Eng 050-Geology for Engineers	3
History 112, 175, 176 or Political Science 90	3		
TOTAL	17	TOTAL	16

SOPHOMORE YEAR

First Semester	Credit	Second Semester	Credit
Mi Eng 110 Surveying for Mineral Engineers	2	Geo 125 Physical Mineralogy and Petrology	3
Mi Eng 215 Materials Handling in Mines	3	Physics 024 Engineering Physics II	4
Stat 213 Applied Engineering Statistics	3	IDE 140 Statics and Dynamics	3
Math 022 Calculus and Analytic Geometry III	4	Math 204 Elementary Differential Equations	3
Geo 220 Structural Geology	4	Mi Eng 235 Underground Mine Design	3
Mi Eng 225 Surface Mine Design	3	(427)	
TOTAL	19	TOTAL	16

JUNIOR YEAR

First Semester	Credit	Second Semester	Credit
Mi Eng 221 Mining Exploration	3	Mi Eng 241 Principles of Mineral Processing	3
Mi Eng 270 Mining Industry Economics	3	Mi Eng 318 Mine Atmospheric Control	3
Civ E 230 Elementary Fluid Mechanics	3	Mi Eng 324 U/G Mining Methods & Equipment	3
Econ 121 Principles of Micro-Economics; or Econ 122 Principles of Macro-Economics	3	Mi Eng 326 Surface Mining Methods & Equipment	3
English 065-Tech Writer in Bus & Industry	3	Mi Eng 331 Rock Mechanics	3
		HSS Elective	3
TOTAL	15	TOTAL	18

SENIOR YEAR

First Semester	Credit	Second Semester	Credit
Mi Eng 307 Principles of Explosives Engineering	3	Mi Eng 376 Environmental Aspects of Mining	3
Mi Eng 317 Mine Power and Drainage	3	*Mi Eng 393 Mine Design Project II*	4
Mi Eng 322 Mine Management	2	Technical Elective	3
Mi Eng 332 Soils and Overburden Materials	2	HSS Elective	3
Mi Eng 392 Mine Design Project I	1		
Technical Elective	3		
TOTAL	14	TOTAL	13

1. The curriculum contains a total of 23 general education credit hours (including Mi Eng 270, Mi Eng 322, Engl 20 and Engl 65). The two HSS electives must be approved by an advisor with at least one course (3 hours) that builds on depth.
2. ***Metal Mining Emphasis:*** Mi Eng 312 (Ore Reserves Analysis & Geostatistics), Geo 294 (Metallic and Industrial Mineral Deposits) or an approved substitute course has to be taken as Technical Electives.
3. ***Explosives Engineering Emphasis:*** Mi Eng 350 (Blasting Tech) and either Mi Eng 301, 390 (Special Topics and Mining Research, both in an explosives area), Ge Eng 371 (Rock Engineering) or Mi Eng 383 (Tunneling/Construction) have to be taken as Technical Electives.
4. ***Quarrying Engineering Emphasis:*** Cv Eng 216 (Construction Materials) and Mt Eng 353 (Mineral Processing I) have to be taken as Technical Electives.
5. ***Coal Mining Emphasis:*** Mi Eng 343 (Coal Mine Development and Production), Mi Eng 311 (Mine Plant Management) or an approved substitute course has to be taken as Technical Electives.
6. ***Mining and Environment Emphasis:*** Geol Eng 235 (Environmental Geosciences), Geol Eng 333 (risk Assessment in Environmental Studies), or approved substitute courses have to be taken as Technical Electives.
7. ***Mining Health and Safety Emphasis:*** Mi Eng 202 (Mine Rescue), Eng Mgt 311 (Human Factors), or other approved substitute courses have to be taken as Technical Electives.
8. ***Sustainable Development Emphasis:*** Pol Sci 315 (Public Policy Analysis), Econ 340 (Environmental and Natural Resource Economics), or other approved substitute courses have to be taken as Technical Electives.
9. Mining courses in *italics* are offered every semester.

MISSOURI S&T

MISSOURI UNIVERSITY OF SCIENCE AND TECHNOLOGY

Formerly University of Missouri-Rolla

April 13, 2009

Registrar
Discipline Specific Curricula Committee
Campus Curricula Committee
Faculty Senate

Missouri University of Science and Technology
Rolla, MISSOURI

Dear Sir/Madam:

RE: Proposed Curriculum for the B.S. Degree in Mining Engineering

Attached is a proposed undergraduate Mining Engineering curriculum effective FS 2009, with changes in specific existing and new courses and a presentation I gave to the undergraduate mining engineering students on the new curriculum.

The existing program has been modified to incorporate specific courses, which strengthen and maintain the program quality for preparing graduates. These changes are the results from a program audit by the Mining Engineering faculty members based on the ABET program criteria for Mining Engineering, and extensive consultations with industry, alums and graduating seniors. The rationale, components and subsequent charges are detailed in the attached documents.

These changes do not require additional faculty and/or resources to execute the new curriculum. If you require additional information, clarification and/or suggestions, please do not hesitate to contact me.

Regards,

Samuel Frimpong, PhD, PEng
Professor and Chair
Robert H. Quenon Endowed Chair

Cc: Mining Engineering Faculty
File

Mining and Nuclear Engineering • 226 McNutt Hall • 1400 N. Bishop • Rolla, MO 65409-0450
Phone: 573-341-4753 • Fax: 573-341-6934 • Email: mining@lists.mst.edu • Web: mining.mst.edu

Effective Year: 2009
Effective Term: Summer ☐ **Fall** ☒ **Spring** ☐
(Creating or modifying a degree program must be effective for a Fall term)

DC # 0329-2009-FIN-00-00

Degree Change Form (DC)

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

Title of degree program, emphasis area, or minor:
Minor in Finance

Department: Business and Information Technology

Briefly describe action requested (Attach documentation as appropriate):
Remove ECON 323 International Finance from the possible electives for the minor.
This change is required for our pursuit of AACSB accreditation. All business courses, including all finance courses, must be offered through the BIT department or a department accredited by ABET.

Recommended by Department: _____ Date: 4/27/09
(Chair signature)

Recommended by Discipline Specific Curricula Committee: _____ Date: 4-29-09
(Chair signature)

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

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

Effective Year: 2010 **DC #** 0331-2009-Psych-000-00
Effective Term: Summer ☐ **Fall** ☐ **Spring** ☒
(Creating or modifying a degree program must be effective for a Fall term)

Degree Change Form (DC)

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

Title of degree program, emphasis area, or minor:
Cognitive Neuroscience Minor

Department: Psychological Science

Briefly describe action requested (Attach documentation as appropriate):
Changing requirements for the Minor:

Old required courses were:
Psych 50, Psych 305, Psych 330, Psych 340 and Psych 240 OR Psych 362.

New required courses are:
Psych 50, Psych 305, Psych 330, Psych 240, and Psych 340 or Psych ~~354~~ 345 or Psych 362.

Recommended by Department: Nancy J. Stone (Chair signature) Date: 4/10/09

Recommended by Discipline Specific Curricula Committee: [signature] (Chair signature) Date: 6-29-09

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

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

Effective Year: 2010 **DC #** 0333-2009-BUS-000-00
Effective Term: Summer ☐ **Fall** ☒ **Spring** ☐
(Creating or modifying a degree program must be effective for a Fall term)

Degree Change Form (DC)

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

Title of degree program, emphasis area, or minor:
BS in Business and Management Systems

Department: Business and Information Technology

Briefly describe action requested (Attach documentation as appropriate):
Add BUS 422 International Business as a major requirement for the degree to comply with AACSB accreditation requirements.
Delete one free elective with the result that 9 hours of free electives are required instead of 12 to keep the degree program at 120 credit hours.

Recommended by Department: Caroline Fisher Date: 5/18/09
(Chair signature)

Recommended by Discipline Specific Curricula Committee: [signature] Date: 6-29-09
(Chair signature)

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

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

DC # 0335-2009-IST-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:
M.S. in Information Science and Technology

Department: Business and Information Technology

Briefly describe action requested (Attach documentation as appropriate):
Graduate students in Information Science and Technology (IST) require more understanding of research directions in the field. Two required courses, IST 336 and IST 361, will be replaced by higher level courses, IST 436 and IST 461.
The degree requirements will then become:
M.S. with Thesis: The M.S. degree with thesis requires the completion of 24 hours of graduate course work (a minimum of 12 at the 400 level), 6 hours of research (IST 490), and the successful completion and defense of a research thesis.
M.S. without Thesis: The M.S. degree without thesis requires the completion of 30 hours of graduate course work (a minimum of 15 at the 400 level).
The following core courses are required of all M.S. students in IST. These courses are designed to insure that all IST M.S. students study the four information systems perspectives of networks and Web design, human perception, management of application implementation, and organizational systems.
- IST 351 Leadership in Technology-Based Organizations
- IST 385 Human-Computer Interaction
- IST 436 Foundations of Internet Computing
- IST 461 Information Systems Project Management

Recommended by Department: _____ (Chair signature) Date: 6/17/09

Recommended by Discipline Specific Curricula Committee: _____ (Chair signature) Date: 7-29-09

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

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

(Revised 1/31/2008)

06/16/09

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Effective Year: 2010 **DC #** 0336-2009-Art-000-00
Effective Term: Summer ☐ **Fall** ☐ **Spring** ☒
(Creating or modifying a degree program must be effective for a Fall term)

Degree Change Form (DC)

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

Title of degree program, emphasis area, or minor:
Studio Art Minor

Department: ALP

Briefly describe action requested (Attach documentation as appropriate):
The Studio Art Minor offers students the opportunity to pursue and area of focus in painting, drawing, photography, etc.

The minor requires 15 hours, including Art 80: Art Appreciation, which is a required course. Students may take additional 12 hours from these offerings:
Art 20: Drawing I;
Art 40: Painting I;
Art 64: Sculpture;
Art 120: Drawing II;
Art 140: Painting II;
Art 203: Architectural Design I;
Art 221: The Study of Photography.

Recommended by Department: _____ Date: 6/12/09
(Chair signature)

Recommended by Discipline Specific Curricula Committee: _____ Date: 7/6/09
(Chair signature)

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

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

Effective Year: FS2009
Effective Term: Summer ☐ Fall ☒ Spring ☐

CC File #7689-2009-MiEng-221-34

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:** Mining and Nuclear Engineering
2. **Discipline and Course Number:** **Present :** Mi Eng 221 **Proposed:** Mi Eng 221
3. **Course Title:** **Present:** **Mining Exploration**
   Proposed: Mining Exploration
   Abbreviated Course Title: Exploration
   (24 Spaces or Less. Only needed for New Courses or Title Changes.)
4. **Catalog Description** *(40 Words or Less)*
   Present: SEE ATTACHED

   Proposed: SEE ATTACHED

5. **If course requires field trip check box:** ☐
6. **Credit Hours:** **Present:** **Lecture:** 3 **Lab:** 0 **Total:** 3
   Proposed: **Lecture:** 3 **Lab:** 0 **Total:** 3
7. **Prerequisites:**
   Present: Geology 125 and MI Eng 110

   Proposed: Geology 125 and Mi Eng 110

8. **Required for Majors:** ☒ **Elective for Majors:** ☐
9. **Justification:** This course is a core requirement of the undergrdaute Mining Engineering program.

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: 04/13/09
(Chair signature)

Recommended by Discipline Specific Curricula Committee _____ Date: 6-10-09
(Chair signature)

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

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

(Revised 1/31/08)

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EXISTING

Mi Eng 221 Mining Exploration (LEC 3.0) Classification of mineral deposits. Role of mining and processing in defining orebodies. Geology, geophysics, geochemistry, geobotany, and drilling in mineral exploration. Sampling orebodies. Ore reserve modeling. Introduction to probability, statistics and geostatistics. Reserve estimation project. Pre-requisites: Geology 125 and Mi Eng 110.

PROPOSED

Mi Eng 221 Mining Exploration (LEC 3.0) Classification of mineral deposits. Role of mining and processing in defining orebodies. Geology, geophysics, geochemistry, geobotany, and drilling in mineral exploration. Sampling methods (channeling, diamond drilling, trenching, bulk and grab), errors and mitigation. Resources/Reserves classification. Definitions and characteristics of proven, probable and possible resources/reserves. Reserve estimation project. Pre-requisites: Geology 125 and Mi Eng 110.

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

Effective Year: FS2009
Effective Term: **Summer** ☐ **Fall** ☒ **Spring** ☐

CC File # 7690-2009-MiEng-225-10

Course Change Form (CC)

This form is for creating or modifying permanent courses.

Course Changes (Check all changes.)

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

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

1. **Department:** Mining and Nuclear Engineering
2. **Discipline and Course Number:** **Present :** MI Eng 201 **Proposed:** MI Eng 225
3. **Course Title:** **Present: Surface Mine Design**
   Proposed: Surface Mine Design
   Abbreviated Course Title: Surface Design
   (24 Spaces or Less. Only needed for New Courses or Title Changes.)
4. **Catalog Description** *(40 Words or Less)*
   Present: SEE ATTACHED

   Proposed: SEE ATTACHED
5. **If course requires field trip check box:** ☐
6. **Credit Hours:** **Present:** **Lecture:** 1 **Lab:** 2 **Total:** 3
   Proposed: **Lecture:** 1 **Lab:** 2 **Total:** 3
7. **Prerequisites:**
   Present: MI Eng 003

   Proposed: MI Eng 003 or consent of instructor
8. **Required for Majors:** ☒ **Elective for Majors:** ☐
9. **Justification:** This course is a core requirement of the undergraduate Mining Engineering program.

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: 04/13/09

Recommended by Discipline Specific Curricula Committee _____ (Chair signature) Date: 6-10-09

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

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

(Revised 1/31/08)

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EXISTING
Mi Eng 201 Surface Mine Design (LEC 1.0 and LAB 2.0): Introduction to surface mining. Engineering design and optimization of surface mine layouts. Geomechanics, geometric and computer-aided mine layouts, haul roads, and waste dump design. Layouts optimization using the floating cone and the Lerchs-Grossmann's algorithms. Design of materials scheduling and sequencing for long and short range mine planning. Use of an industry standard and commercially available mine design software.

PROPOSED
Mi Eng 225 Surface Mine Design (LEC 1.0 and LAB 2.0): Introduction to surface mining. Drill hole data analysis and database management. Conventional methods for ore reserves estimation. Engineering design and optimization of surface mine layouts. Geomechanics, geometric and computer-aided mine layouts, haul roads, and waste dump design. Layouts optimization using the floating cone and the Lerchs-Grossmann's algorithms. Design of materials scheduling and sequencing for long and short range mine planning. Use of an industry standard and commercially available mine design software.

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Effective Year: FS2009
Effective Term: **Summer** ☐ **Fall** ☐ **Spring** ☒

CC File # 7691-2009-MiEng-235-10

Course Change Form (CC)

This form is for creating or modifying permanent courses.

Course Changes (Check all changes.)

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

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

1. **Department:** Mining and Nuclear Engineering
2. **Discipline and Course Number:** **Present :** Mi Eng 201 **Proposed:** MIN 235
3. **Course Title:** **Present: Underground Mine Design**
   Proposed: Underground Mine Design
   Abbreviated Course Title: Underground Design
   (24 Spaces or Less. Only needed for New Courses or Title Changes.)
4. **Catalog Description** *(40 Words or Less)*
   Present: SEE ATTACHED

   Proposed: SEE ATTACHED
5. **If course requires field trip check box:** ☐
6. **Credit Hours:**

Present:	**Lecture:** 1	**Lab:** 2	**Total:** 3
Proposed:	**Lecture:** 1	**Lab:** 2	**Total:** 3

7. **Prerequisites:**
   Present: Mi Eng 003

   Proposed: Mi Eng 003 or consent of instructor
8. **Required for Majors:** ☒ **Elective for Majors:** ☐
9. **Justification:** This course is a core requirement of the undergraduate Mining Engineering program.
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: 04/13/09

Recommended by Discipline Specific Curricula Committee _____ (Chair signature) Date: 6-10-09

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

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

(Revised 1/31/08)

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EXISTING
Mi Eng 201 Underground Mine Design (LEC 1.0 and LAB 2.0): Introduction to underground mining. Engineering design and optimization of mine layouts. Geomechanical, geometric and computer-aided underground mine layouts design. Empirical and numerical design methods for underground mine openings; pillar and roof span design using beam theories; caving and ore drawing mechanics. Design of materials scheduling and sequencing for long and short range mine planning. Use of an industry standard and commercially available mine design software.

PROPOSED
MI Eng 235 Underground Mine Design (LEC 1.0 and LAB 2.0): Introduction to underground mining. Parametric statistics and introductory geostatistics for ore reserves estimation. Engineering design and optimization of mine layouts. Geomechanical, geometric and computer-aided underground mine layouts design. Empirical and numerical design methods for underground mine openings; pillar and roof span design using beam theories; caving and ore drawing mechanics. Design of materials scheduling and sequencing for long and short range mine planning. Use of an industry standard and commercially available mine design software.

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

Effective Year: FS2010
Effective Term: **Summer** ☐ **Fall** ☐ **Spring** ☒

CC File # 7692-2009-MiEng-324-32

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:** Mining and Nuclear Engineering
2. **Discipline and Course Number:** **Present:** MI Eng 324 **Proposed:** MI Eng 324
3. **Course Title:** **Present: Underground Mining Methods and Equipment**
   Proposed: Underground Mining Methods and Equipment
   Abbreviated Course Title: Underground Mining
   (24 Spaces or Less. Only needed for New Courses or Title Changes.)
4. **Catalog Description** *(40 Words or Less)*
   Present: Principles of planning, constructing, and operating economically viable surface mines. Cost effective mining methods: room-and-pillar, stopping, caving. Selection of equipment for durface mining operations. Optimization of mine performance.

   Proposed: Principles of planning, constructing, and operating economically viable surface mines. Cost effective mining methods: room-and-pillar, sublevel open stoping, VCR, shrinkage, sublevel caving, cut-and-fill, block caving, longwall. Selection of equipment for durface mining operations. Optimization of mine performance. Field trip required.
5. **If course requires field trip check box:** ☒
6. **Credit Hours:** **Present:** **Lecture:** 3 **Lab:** 0 **Total:** 3
   Proposed: **Lecture:** 3 **Lab:** 0 **Total:** 3
7. **Prerequisites:**
   Present: coreq. MI Eng 221; MI Eng 331

   Proposed: MI Eng 235, Mi Eng 270; coreq. MI Eng 221; Mi Eng 331
8. **Required for Majors:** ☒ **Elective for Majors:** ☐
9. **Justification:** This course is a core requirement of the undergraduate Mining Engineering program.

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: 04/13/09

Recommended by Discipline Specific Curricula Committee _____ (Chair signature) Date: 6-10-09

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

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

(Revised 1/31/08)

04/13/09

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Effective Year: SP2010
Effective Term: **Summer** ☐ **Fall** ☐ **Spring** ☒

CC File # 7693-2009-MiEng-326-32

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:** Mining and Nuclear Engineering
2. **Discipline and Course Number:** **Present :** Mi Eng 326 **Proposed:** Mi Eng 326
3. **Course Title:** **Present: Surface Mining Methods and Equipment**
   Proposed: Surface Mining Methods and Equipment
   Abbreviated Course Title: Surface Mining
   (24 Spaces or Less. Only needed for New Courses or Title Changes.)
4. **Catalog Description** *(40 Words or Less)*
   Present: Principles of planning, constructing, and operating economically viable surface mines. Cost effective mining methods: placer mining, strip mining, open pit mining, quarrying. Selection of equipment for surface mining operations. Optimization of mine performance.
   Proposed: Principles of planning, constructing, and operating economically viable surface mines. Cost effective mining methods: placer mining, strip mining, open pit mining, quarrying. Selection of equipment for surface mining operations. Optimization of mine performance. Field trip required.
5. **If course requires field trip check box:** ☒
6. **Credit Hours:** **Present:** **Lecture:** 3 **Lab:** 0 **Total:** 3
   Proposed: **Lecture:** 3 **Lab:** 0 **Total:** 3
7. **Prerequisites:**
   Present: Mi Eng 215; coreq. Mi Eng 331
   Proposed: Mi Eng 215; Mi Eng 225; Mi Eng 270; coreq. Mi Eng 331
8. **Required for Majors:** ☒ **Elective for Majors:** ☐
9. **Justification:** This course is a core requirement of the undergraduate Mining Engineering program.

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: 04/13/09

Recommended by Discipline Specific Curricula Committee _____ (Chair signature) Date: 6-10-09

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

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

(Revised 1/31/08)

04/13/09

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

Effective Year: FS2009
Effective Term: **Summer** ☐ **Fall** ☐ **Spring** ☒

CC File # 7694-2009-Mi Eg-331-31

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:** Mining and Nuclear Engineering
2. **Discipline and Course Number:** **Present :** Mi Eng 331 **Proposed:** Mi Eng 331
3. **Course Title:** **Present: Rock Mechanics I**
   Proposed: Rock Mechanics
   Abbreviated Course Title: RMECH
   (24 Spaces or Less. Only needed for New Courses or Title Changes.)
4. **Catalog Description** *(40 Words or Less)*
   Present: Rock mass ratings; empirical failure criteria; slope and high wall stability; field stresses, design of underground openings, pillars, and roof beams; principles of roof bolt design; surface subsidence.

   Proposed: Applications of the fundamental principles of mechanics to engineering problems of equilibrium, strength and stiffness of rock materials. Review of in-situ stresses, laboratory and field instrumentation, rock and rockmass properties, pillar design, roof span design, rock reinforcement, surface subsidence, slope stability, and violent failures.
5. **If course requires field trip check box:** ☒
6. **Credit Hours:** **Present:** **Lecture:** 2 **Lab:** 0 **Total:** 0
   Proposed: **Lecture:** 2 **Lab:** 1 **Total:** 3
7. **Prerequisites:**
   Present: IDE 140 or IDE 50 and 150; and Geology 220

   Proposed: IDE 140 or IDE 50 and 150; and Geology 220
8. **Required for Majors:** ☒ **Elective for Majors:** ☐
9. **Justification:** This course is a core requirement of the undergraduate Mining Engineering program. It has been combined with Mi Eng 232 to remove overlap for delivery efficiency.
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: 04/18/09

Recommended by Discipline Specific Curricula Committee _____ (Chair signature) Date: 6-10-09

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

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

(Revised 1/31/08)

04/13/09

Effective Year: FS2009
Effective Term: Summer ☐ Fall ☒ Spring ☐

CC File # 7695-2009-MiEng-332-10

Course Change Form (CC)

This form is for creating or modifying permanent courses.

Course Changes (Check all changes.)

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

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

1. **Department:** Mining and Nuclear Engineering
2. **Discipline and Course Number: Present :** MI Eng 301 **Proposed:** Mi Eng 332
3. **Course Title: Present: Soils and Overburden Materials for Mining Engineering**
   Proposed: Soils and Overburden Materials for Mining Engineering
   Abbreviated Course Title: Soils and Overburden
   (24 Spaces or Less. Only needed for New Courses or Title Changes.)
4. **Catalog Description** *(40 Words or Less)*
   Present: Physical and mechanical properties of soils and overburden materials. Soils and overburden characterization for reclamation and mine closure and overburden blasting. Soil failure modes and slope stability for surface mine layouts, waste dumps, and foundations for heavy mining machinery.
   Proposed: Physical and mechanical properties of soils and overburden materials. Soils and overburden characterization for reclamation and mine closure and overburden blasting. Soil failure modes and slope stability for surface mine layouts, waste dumps, tailings and earth dams, and foundations for heavy mining machinery.
5. **If course requires field trip check box:** ☐
6. **Credit Hours:**

Present:	**Lecture:** 2	**Lab:** 0	**Total:** 2
Proposed:	**Lecture:** 2	**Lab:** 0	**Total:** 2

7. **Prerequisites:**
   Present: IDE 140 or IDE 50 and 150
   Proposed: IDE 140 or IDE 50 and 150
8. **Required for Majors:** ☒ **Elective for Majors:** ☐
9. **Justification:** This course is a core requirement of the undergraduate Mining Engineering program.
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: 04/13/09

Recommended by Discipline Specific Curricula Committee _____ (Chair signature) Date: 6-10-09

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

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

(Revised 1/31/08)

04/13/09

Effective Year: FS2009
Effective Term: **Summer** ☐ **Fall** ☒ **Spring** ☒

CC File # 7696-2009-MiEg-392-10

Course Change Form (CC)

This form is for creating or modifying permanent courses.

Course Changes (Check all changes.)

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

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

1. **Department:** Mining and Nuclear Engineering
2. **Discipline and Course Number:** **Present :** **Proposed:** Mi Eng 392
3. **Course Title:** **Present:**
   Proposed: Mine Design Project I
   Abbreviated Course Title: Mine Design I
   (24 Spaces or Less. Only needed for New Courses or Title Changes.)
4. **Catalog Description** *(40 Words or Less)*
   Present:

   Proposed: Formation of mine design project teams and acquisition of project data from industry. Geostatistical methods for ore reserves estimation. Develop complete project schedule and milestones for executing the project tasks in Mi Eng 393 (Mine Design Project II). Set up database for Mi Eng 393 and interact with selected mine design software packages.
5. **If course requires field trip check box:** ☐
6. **Credit Hours:** **Present:** **Lecture:** **Lab:** **Total:**
   Proposed: **Lecture: 0** **Lab: 1** **Total: 1**
7. **Prerequisites:**
   Present:

   Proposed:
8. **Required for Majors:** ☒ **Elective for Majors:** ☐
9. **Justification:** This course is a core requirement of the undergraduate Mining Engineering program. It is required to provide the basis and execution efficiency for MIN 393.
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: 04/13/09

Recommended by Discipline Specific Curricula Committee _____ (Chair signature) Date: 6-10-09

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

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

(Revised 1/31/08)

Effective Year: FS2009
Effective Term: Summer ☐ Fall ☒ Spring ☒

CC File # 7697-2009-MiEg-393-31

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:** Mining and Nuclear Engineering
2. **Discipline and Course Number:** **Present :** Mi Eng 393 **Proposed:** Mi Eng 393
3. **Course Title:** **Present: Mine Planning and Design**
   Proposed: Mine Design Project II
   Abbreviated Course Title: Mine Design II
   (24 Spaces or Less. Only needed for New Courses or Title Changes.)
4. **Catalog Description** *(40 Words or Less)*
   Present: SEE ATTACHED

   Proposed: SEE ATTACHED
5. **If course requires field trip check box:** ☐
6. **Credit Hours:**

Present:	**Lecture:** 2	**Lab:** 2	**Total:** 4
Proposed:	**Lecture:** 1	**Lab:** 3	**Total:** 4

7. **Prerequisites:**
   Present: Completion of 110 hours in the Mining Engineering Curriculum

   Proposed: MI Eng 392 and completion of 110 hours in the Mining Engineering Curriculum
8. **Required for Majors:** ☒ **Elective for Majors:** ☐
9. **Justification:** This course is a core requirement of the undergraduate Mining Engineering program.

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: 04/13/09

Recommended by Discipline Specific Curricula Committee _____ (Chair signature) Date: 6-10-09

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

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

(Revised 1/31/08)

04/13/09

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EXISTING

Mi Eng 393 Mine Planning and Design (LEC 2.0 and LAB 2.0): Selection of a mining design project that results in the preparation of a comprehensive engineering report and oral presentation for the economic exploitation of the selected geologic deposit. The course includes instruction and student guidance that integrates and applies engineering economics, sciences, use of commercial software and principles to develop a mineable deposit. Prerequisite: Completion of 110 hours in the Mining Engineering Curriculum.

PROPOSED

Mi Eng 393 Mine Design Project II (LEC 1.0 and LAB 3.0): Capstone design project that culminates in the completion and oral presentation of a comprehensive mine feasibility study. Project includes mine layouts design and optimization, production planning, equipment selection and flowsheet design based on detailed geological, mineral resources/reserves, geotechnical, hydrological and hydro-geological modeling. Project also incorporates commodity markets, environmental and permitting, conceptual mine planning and methods, mine-mill organization, facilities and infrastructure requirements, and economic and risk analyses. Prerequisites: Mi Eng 392 and completion of 110 hours in the Mining Engineering Curriculum.

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

Effective Year: 2009
Term: Summer ☐ **Fall X** **Spring** ☐

CC File # 7700-2009-ALP-111-10

Course Change Form (CC)

This form is for creating or modifying permanent courses.

Course Changes (Check all changes.)

New Course X **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: Arts, Languages & Philosophy

2. Discipline and Course Number: Present : 101 **Proposed: 111**

3. Course Title: Present: ALP
Proposed: Global Village

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

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

Present:

Proposed: The course explores connections among language, art and culture at regional, national, and international scales. It aims to complement existing cross-cultural programs on campus while encouraging formal and informal interaction among students, faculty, alumni, and the campus community

5. If course requires field trip check box: ☐

6. Credit Hours: **Present:** **Lecture:** **Lab:** **Total:**
Proposed: **Lecture: 0.5** **Lab:** **Total: 0.5**

7. Prerequisites:
Present:

Proposed: Entrance requirements

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

9. Justification:

10. Semesters previously offered as an experimental course (101, 201, 301, 401): FS 2008, SP 2009

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: 5/5/09

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

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

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

(Revised 1/29/09)

Effective Year: 2009
Term: Summer ☐ Fall x Spring ☐

CC File # 7701-2009-TCom-433-10

Course Change Form (CC)

This form is for creating or modifying permanent courses.

Course Changes (Check all changes.)

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

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

1. **Department:** English and Technical Communication
2. **Discipline and Course Number:** **Present:** ~~Tech Com 333~~ **Proposed:** Tech Com ~~333~~ 433
3. **Course Title:** **Present:** Proposal Writing
   Proposed: Proposal Writing

   Abbreviated Course Title:
   (24 Spaces or Less. Only needed for New Courses or Title Changes.)
4. **Catalog Description** *(300 Character Spaces or Less.)*
   Present:

   Proposed:

5. **If course requires field trip check box:** ☐
6. **Credit Hours:**

	Present:	Lecture:	Lab:	Total:
Proposed:	Lecture: 3	Lab:	Total:	

7. **Prerequisites:**
   Present:

   Proposed:

8. **Required for Majors:** ☐ **Elective for Majors:** ☐
9. **Justification:** The Proposal Writing course is currently being taught as Tech Com 333. Tech Com 433 would be taught concurrently, but would accommodate graduate enrollment, especially for doctoral-level students. Graduate students would do additional work and be held to higher standards for assessment.
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) ~~Tech Com 333~~ 2) 3)

4) 5) 6)

Recommended by Department Gene Doty (Chair signature) Date: 4-13-09

Recommended by Discipline Specific Curricula Committee (Chair signature) Date: 6/15/09

Approved by Curricula Committee: (Chair signature) Date:

Approved by Faculty Senate: (Chair signature) Date:

(Revised 1/29/09)

Effective Year: 2009
Effective Term: **Summer** ☐ **Fall** ☒ **Spring** ☐

CC File # 7702-2009-Psych-345-32

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: Psychological Science

2. Discipline and Course Number: **Present :** 345 **Proposed:**

3. Course Title: **Present:** **Evolutionary Psychology**
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: PSY 50 and PSY 140

Proposed: PSY 50

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

9. Justification:

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

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

1) **2)** **3)**

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

Recommended by Department Nancy J. Stone (Chair signature) Date: 4/22/09

Recommended by Discipline Specific Curricula Committee (Chair signature) Date: 6-29-09

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

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

Effective Year: 2009
Term: Summer ☐ **Fall X Spring** ☐

CC File # 7705-2009-05-378-20

Course Change Form (CC)

This form is for creating or modifying permanent courses.

Course Changes (Check all changes.)

New Course ☐ **Course Deletion** X **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: Computer Science

2. Discipline and Course Number: **Present :** 378 **Proposed:**

3. Course Title: **Present:** **Introduction To Neural Networks & Applications**
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 artificial neural network architectures, adaline, madaline, back propagation, BAM, and Hopfield memory, counterpropagation networks, self organizing maps, adaptive resonance theory, are the topics covered. Students experiment with the use of artificial neural networks in engineering through semester projects. (Co-listed with Sys Eng 378, El Eng 368)

Proposed:

5. If course requires field trip check box: ☐

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

7. Prerequisites:
Present: Math 229 or Math 204 or equivalent

204 or equivalent

Proposed:

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

9. Justification: The neural network course housed in Engineering Management does not coincide with advanced content in the area. Thus, we request removal of the co-listing and deletion of CS 378.

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: May 6, 09

Recommended by Discipline Specific Curricula Committee _____ (Chair signature) Date: 8/14/09

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 # 7708-2009-CS-462-10

Course Change Form (CC)

This form is for creating or modifying permanent courses.

Course Changes (Check all changes.)

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

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

1. Department: Computer Science

2. Discipline and Course Number: **Present :** CS 401 **Proposed:** CS 462

3. Course Title: **Present: Advanced network security**
Proposed: Advanced network security

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

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

Present: Topics covered include network security issues such as authentication, anonymity, traceback, denial of service, confidentiality, forensics, etc. in wired and wireless networks. Students will have a clear, in-depth understanding of state of the art network security attacks and defenses.

Proposed: Topics covered include network security issues such as authentication, anonymity, traceback, denial of service, confidentiality, forensics, etc. in wired and wireless networks. Students will have a clear, in-depth understanding of state of the art network security attacks and defenses.

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:

Proposed: CpE 349 or CS 385

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

9. Justification:

10. Semesters previously offered as an experimental course (101, 201, 301, 401): Sp 2008 and Sp 2009

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: May 19, 09

Recommended by Discipline Specific Curricula Committee _____ (Chair signature) Date: 8/14/09

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

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

(Revised 1/29/09)

CC File #7712-2009-IST-436-35

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:** Business & Information Technology
2. **Discipline and Course Number:** **Present :** IST 336 **Proposed:** IST 436
3. **Course Title:** **Present:** **Foundations of Internet Computing**
   Proposed:
   Abbreviated Course Title:
   (24 Spaces or Less. Only needed for New Courses or Title Changes.)
4. **Catalog Description** *(40 Words or Less)*
   Present: Computer networks provide the basic transport foundation for Internet Computing. They are covered thoroughly (LANs, WANs, packet switching, protocols, etc.). Design principles and processes for Web sites, e-commerce considerations, site usability issues, wireless communications, and security considerations are also covered.
   Proposed: The foundations of Internet Computing include computer networks and Web sites. Networks are covered thoroughly and research directions for networks are discussed. Web site design and research findings about site usability considerations are examined. Security of communications for computing, especially wireless communications, are explored.
5. **If course requires field trip check box:** ☐
6. **Credit Hours:** **Present:** **Lecture:** 3 **Lab:** **Total:** 3
   Proposed: **Lecture:** **Lab:** **Total:**
7. **Prerequisites:**
   Present: IST MS entrance requirements.
   Proposed: IST MS entrance requirments, including solid programming knowledge.
8. **Required for Majors:** ☒ **Elective for Majors:** ☐
9. **Justification:** Students require a more rigorous course and more examination of research directions.

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: 6/17/09

Recommended by Discipline Specific Curricula Committee _____ (Chair signature) Date: 7-29-09

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

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

(Revised 1/31/08)

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

CC File # 7713-2009-IST-461-10

Course Change Form (CC)

This form is for creating or modifying permanent courses.

Course Changes (Check all changes.)

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

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

1. **Department:** Business and Information Technology
2. **Discipline and Course Number:** **Present :** **Proposed:** IST 461
3. **Course Title:** **Present:**
   Proposed: Information Systems Project Management
   Abbreviated Course Title: IS Project Management
   (24 Spaces or Less. Only needed for New Courses or Title Changes.)
4. **Catalog Description** *(40 Words or Less)*
   Present:

   Proposed: Project management principles, first from a general perspective, and then focused specifically on information system application development are explored. Topics include requirements analysis, project scheduling, risk management, quality assurance, testing, and team coordination. Report writing and research literature searches are required.
5. **If course requires field trip check box:** ☐
6. **Credit Hours:** **Present:** **Lecture:** **Lab:** **Total:**
   Proposed: **Lecture: 3** **Lab:** **Total: 3**
7. **Prerequisites:**
   Present:

   Proposed: IST MS Entrance requirements, with strong programming knowledge.
8. **Required for Majors:** ☒ **Elective for Majors:** ☐
9. **Justification:** The existing IST 361 course serves our undergraduates well, but additional work in research pertaining to IS project management and in report writing is needed for our graduate students. This course may not be taken for credit if IST 361 has been taken.
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: 6/17/09

Recommended by Discipline Specific Curricula Committee _____ (Chair signature) Date: 7-29-09

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
Effective Term: Summer ☐ Fall ☐ Spring ☒

CC File # 7714-2009-M+IS-397-D

Course Change Form (CC)

This form is for creating or modifying permanent courses.

Course Changes (Check all changes.)

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

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

1. **Department:** Business and Information Technology
2. **Discipline and Course Number:** **Present :** M&IS 397 **Proposed:**
3. **Course Title:** **Present:** **Capstone Seminar in Management and Information Systems**
   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:**

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: 6/17/09

Recommended by Discipline Specific Curricula Committee _____ (Chair signature) Date: 7-29-09

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

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

(Revised 1/31/08)

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

CC File # 7715-2009-M+IS-101-20

Course Change Form (CC)

This form is for creating or modifying permanent courses.

Course Changes (Check all changes.)

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

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

1. **Department:** Business and Information Technology
2. **Discipline and Course Number:** **Present :** M&IS 101 **Proposed:**
3. **Course Title:** **Present:** **Special Topics**
   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:**

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 Fish (Chair signature) Date: 6/17/09

Recommended by Discipline Specific Curricula Committee (Chair signature) Date: 7-29-09

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

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

(Revised 1/31/08)

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

CC File # 7717-2009-Art-30-35

Course Change Form (CC)

This form is for creating or modifying permanent courses.

Course Changes (Check all changes.)

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

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

1. Department: ALP

2. Discipline and Course Number: **Present :** Art 30 **Proposed:** 140

3. Course Title: **Present: Drawing II**
Proposed: Advanced Drawing

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

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

Present: Applicaton of drawing principles: cast and life drawing. Exercises in representational rendering.

Proposed: Advanced application of drawing principles: cast and life drawing. Exercises in representational rendering.

5. If course requires field trip check box: ☐

6. Credit Hours:

Present:	**Lecture:**	**Lab:**	**Total:**
Proposed:	**Lecture:**	**Lab: 3**	**Total: 3**

7. Prerequisites:
Present: Art 20

Proposed: Art 20

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

9. Justification: To provide another level of art study beyond the introductory painting class with an appropriate number .

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: 6/12/09
(Chair signature)

Recommended by Discipline Specific Curricula Committee _____ Date: 7/6/09
(Chair signature)

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

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

(Revised 1/29/09)

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

CC File # 7718-2009-Art-50-35

Course Change Form (CC)

This form is for creating or modifying permanent courses.

Course Changes (Check all changes.)

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

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

1. Department: ALP

2. Discipline and Course Number: **Present :** Art 50 **Proposed:** 140

3. Course Title: **Present: Painting II**
Proposed: Advanced Painting

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

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

Present: Continuation of Art 40

Proposed: Advanced exploration of oil painting techiniques and methods. Still life, landscape, and figure.
i

5. If course requires field trip check box: ☐

6. Credit Hours:

	Present:	Lecture:	Lab:	Total:
	Proposed:	Lecture:	Lab: 3	Total: 3

7. Prerequisites:
Present: Art 40

Proposed: Art 40

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

9. Justification: To provide another level of art study beyond the introductory painting class with an appropriate number.

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: 6/12/09

Recommended by Discipline Specific Curricula Committee _____ (Chair signature) Date: 7/6/09

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 # 7726-2009-BioSci-358-10

Course Change Form (CC)

This form is for creating or modifying permanent courses.

Course Changes (Check all changes.)

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

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

1. Department: Biological Sciences

2. Discipline and Course Number: **Present :** BIO SCI 301 **Proposed:** BIO SCI 358

3. Course Title: **Present: Caribbean Biodiversity**
Proposed: Advanced Biodiversity

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

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

Present: This course is designed to introduce students to the flora and fauna of San Salvador Island, Bahamas, and the surrounding coral reef communities. In addition to examining biodiversity, the course will focus on factors leading to the enhancement and reduction of biodiversity as well as modern techniques used to measure and monitor biodiversity. Topics will include...

Proposed: This course focuses on the enhancement and reduction of biodiversity and modern techniques of measuring and monitoring it. Topics include biogeography, community structure, competition, predation, food webs, geology-biology relationships, environmental change, and human impact. Additional costs and a week-long field trip are required.

5. If course requires field trip check box: ☒

6. Credit Hours:

Present:	**Lecture:** 3	**Lab:** 0	**Total:** 3
Proposed:	**Lecture: 3**	**Lab: 0**	**Total: 3**

7. Prerequisites:

Present: ~~Sophomore standing or higher. Priority enrollment given to Bio Sci majors~~.
Bio Sci 235 OR Bio Sci 251

Proposed: ~~Sophomore standing or higher~~. Priority enrollment given to Bio Sci majors.

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

9. Justification: Biodiversity is critical area of study for biologists. This course will provide advanced knowledge of topics and training in the methods used to study biodiversity, as well as first-hand experience with studying biodiversity in the field.

10. Semesters previously offered as an experimental course (101, 201, 301, 401): SP05, SP07

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: 4/24/09

Recommended by Discipline Specific Curricula Committee _____ (Chair signature) Date: 8/14/09

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

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

(Revised 1/29/09)

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

EC File # 2182-SP2010-BUS-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: Business and Information Technology

Discipline and Course Number: BUS 301

Course Title: Accounting and Finance Essentials

Abbreviated Title *(24 spaces or less)*: Acct & Fin Essentials

Instructor(s): Eng and Lin

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

Prerequisites: None

Semester(s) previously taught: None

Brief Course Description: (40 words or less)
An introduction to the essentials of financial and managerial accounting and finance for running a business designed for students planning to enter the MBA program and for non-business students who want some business background. Credit in this course can not be applied to any major or minor in business, IST, or economics.

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: 5/19/09
(Chair Signature)

Discipline Specific Curricula Committee: _____ Date: 6-29-09
(Chair signature)

Curricula Committee: _____ Date: _____
(Chair Signature)

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

EC File # 2183-SP2010-BUS-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: Business and Information Technology

Discipline and Course Number: BUS 301

Course Title: Management, Marketing and Business Law Essentials

Abbreviated Title *(24 spaces or less)*: Mgt & Mkt Essentials

Instructor(s): Elrod and Kalliny

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

Prerequisites: None

Semester(s) previously taught: None

Brief Course Description: (40 words or less)
An introduction to the essentials of management, marketing, and business law for running a business designed for students planning to enter the MBA program and for non-business students who want some business background. Credit in this course can not be applied to any major or minor in business, IST, or economics.

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

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

Department Chair: Caroline Tucker (Chair Signature) Date: 5/19/09

Discipline Specific Curricula Committee: (Chair signature) Date: 6-29-09

Curricula Committee: _____ (Chair Signature) Date: _____

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

EC File # 2184-SP2010-BUS-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: Business and Information Technology

Discipline and Course Number: BUS 301

Course Title: Operations Management and Management Information Systems Essentials

Abbreviated Title *(24 spaces or less)*: Ops & MIS Essentials

Instructor(s): Elrod and Sheng

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

Prerequisites: None

Semester(s) previously taught: None

Brief Course Description: (40 words or less)
An introduction to the essentials of operations management and management information systems for running a business designed for students planning to enter the MBA program and for non-business students who want some business background. Credit in this course can not be applied to any major or minor in business, IST, or economics.

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: 5/19/09
(Chair Signature)

Discipline Specific Curricula Committee: _____ Date: 6-29-09
(Chair signature)

Curricula Committee: _____ Date: _____
(Chair Signature)

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

EC File # 2187-Sp2010-Hist-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: History

Discipline and Course Number: Hist 301

Course Title: Making of Modern Germany

Abbreviated Title *(24 spaces or less)*: Making Modern Germany

Instructor(s): Dr. Petra DeWitt

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

Prerequisites: History 112 or 175

Semester(s) previously taught:

Brief Course Description: (40 words or less)
A survey of modern Germany from Reformation through the present with special emphasis on nineteenth and twentieth centuries. Major themes include social, intellectual, cultural, political, and economic aspects of modern and contemporary Germany.

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: 6/8/09

Discipline Specific Curricula Committee: _____ (Chair signature) Date: 6/15/09

Curricula Committee: _____ (Chair Signature) Date: _____

08/08/09

(Revised 1/31/2008)

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

EC File # 2188-Sp2010-BioSci-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: Biological Sciences

Discipline and Course Number: Bio 301

Course Title: Pharmacology

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

Instructor(s): Robert S. Aronstam

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

Prerequisites: ~~Cellular Biology (Bio 211) and organic chemistry~~
Bio Sci 211 and Chem 221

Semester(s) previously taught: WS 2008

Brief Course Description: (40 words or less)
The study of chemicals that produce specific biological effects, as well as the search for new agents of therapeutic value. We will consider basic principles of drug action at the cellular and molecular levels, the chemotherapy of microbial and neoplastic diseases, and drug action on major physiological systems, including the nervous and cardiovascular systems.

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: Robert S Aronstam (Chair Signature) Date: 6/12/09

Discipline Specific Curricula Committee: John P. Hogan (Chair signature) Date: 6/14/09

Curricula Committee: _____ (Chair Signature) Date: _____

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

EC File # 2189-Sp2010-BioSci-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: Biological Sciences

Discipline and Course Number: 301

Course Title: Special Topics: Nanobiotechnology

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

Instructor(s): Yue-wern Huang

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

Prerequisites: Cell Biology (211) and General Genetics (231)

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 course describes recent development of nanobiotechnology in fundamental biological research as well as biomedical studies.

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: Robert S Arrowsmith (Chair Signature) Date: 6/12/09

Discipline Specific Curricula Committee: John P. Hogan (Chair signature) Date: 8/14/09

Curricula Committee: _____ (Chair Signature) Date: _____

Effective Term: FS2009 EC File #2191 - FS 2009 - MKT - 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: Business & Information Technol

Discipline and Course Number: MKT 301

Course Title: Integrated Marketing Communications

Abbreviated Title *(24 spaces or less)*: MKT Communications

Instructor(s): Caroline Fisher

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

Prerequisites: MKT 311

Semester(s) previously taught: None

Brief Course Description: (40 words or less)
This course emphasizes the development of integrated marketing communications programs. Advertising, public relations, personal selling, promotional packaging, along with many other sales-stimulating methods and techniques are covered.

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: Caroline Fisher **Date:** 6/17/09
Chair Signature

College/School Dean: DSC **Date:** 7-29-09
Dean Signature

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

(Revised 2/14/2002)

06/16/09

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Effective Year: 2009
Effective Term: Summer ☐ Fall ☒ Spring ☐

EC File # 2192-FS2009-IST-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: BIT

Discipline and Course Number: IST 301

Course Title: Advanced Networking

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

Instructor(s): S. Dalton; B. Kehr

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

Prerequisites: IST 321 or equivalent

Semester(s) previously taught: none

Brief Course Description: (40 words or less)
Explores advanced networking topics including scalable interworks, IPv6, spanning tree protocol, network and subnet IP addressing, optimized converged networks, "Green" technology, fiber optic technology, emergency preparedness, disaster recovery; configuring LANs, WANs, frame relay, ATM, routing protocols; includes labs and simulations.

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: 6/17/09
(Chair Signature)

Discipline Specific Curricula Committee: _____ Date: 7-29-09
(Chair signature)

Curricula Committee: _____ Date: _____
(Chair Signature)

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

EC File # 2195-Sp2010-Hist-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: History and Political Science

Discipline and Course Number: 301

Course Title: Mark Twain's America

Abbreviated Title *(24 spaces or less)*: Mark Twain's America

Instructor(s): Dr. David Levy

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

Prerequisites: Hist 175 or 176

Semester(s) previously taught: Never taught before

Brief Course Description: (40 words or less)
This course will explore the life of Mark Twain (1835-1910), relating his life to the major social, economic, political, and intellectural developments in the United States that touched him, affected his ideas, and influenced his writing.

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

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

Department Chair: _____ (Chair Signature) Date: 7/7/09

Discipline Specific Curricula Committee: _____ (Chair signature) Date: 7/13/09

Curricula Committee: _____ (Chair Signature) Date: _____

07/07/09 (Revised 1/31/2008)

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

EC File # 2199-Sp 2010-BioSci-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: Biological Sciences

Discipline and Course Number: BIO 301

Course Title: Genomics

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

Instructor(s): Ronald L. Frank

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

Prerequisites: BIO 331 Molecular Genetics

Semester(s) previously taught: N/A

Brief Course Description: (40 words or less)
This course offers a general overview of the field of genomics. Topics covered include genome sequencing and annotation, transcriptomics, proteomics, metabolomics, genomic variation, and an overview of human, and several animal, plant, and microbial genome projects.

List all co-listed courses: Include initials of Dept. Chair, if signature is not already included below.
1) N/A **2)** **3)**

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

Department Chair: _____ Date: 7/29/09
(Chair Signature)

Discipline Specific Curricula Committee: _____ Date: 8/14/09
(Chair signature)

Curricula Committee: _____ Date: _____
(Chair Signature)