



**Campus Curricula Committee Meeting Agenda
October 31, 2018**

**9:00am - 10:30am, Bertelsmeyer 110H
(For Faculty Senate Meeting of November 15, 2018)**

Review of submitted Course Change forms:

File: 2032.1	BIO SCI 1982: Introduction to Biomedical Problems
File: 1186.1	CIV ENG 5513: Traffic Engineering
File: 4070.15	CIV ENG 5515: Advanced Traffic Operations and Capacity Analysis
File: 4562	EDUC 3290: Coordination of Cooperative Education
File: 1314.1	ENGLISH 2243: Science Fiction
File: 4379.5	EXP ENG 5914: Explosives Manufacturing
File: 4499.4	FINANCE 5310: Financial Technology and Analytics
File: 1211.10	GEOLOGY 4630: Systematic Paleontology
File: 2420.1	NUC ENG 4365: Radiation Protection Engineering
File: 424.1	NUC ENG 6211: Computational Methods In Nuclear Engineering
File: 2033.1	NUC ENG 6221: Advanced Nuclear Reactor Design
File: 738.1	NUC ENG 6281: Probabilistic Risk Assessment II

Review of submitted Experimental Course forms:

File: 4573	BIO SCI 5001.003: Forest Insect Diversity & Ecology
File: 4574	CER ENG 3001.001: Engineering Leadership and Case Studies in Materials Engineering
File: 4565	ECON 3001.002: Advancing Innovation in Rural Economic Ecosystems
File: 4572	GEO ENG 5001.003: Geological and Civil Engineering Issues in Southern Africa
File: 4571	GEO ENG 6001.002: Geological and Civil Engineering Practices in Southern Africa
File: 4558	GEOLOGY 5001.002: Introduction to Geoscience Research Methodologies
File: 4576	GEOLOGY 6001.002: Applied Petroleum System Analysis
File: 4575	GEOLOGY 6001.003: Fossils, Deep Time and Extinctions

Discussion about certificate conversion.

ENG MGT 5320: Project Management was tabled at the October 3, 2018 CCC meeting and the proposed changes have since been withdrawn.

Course Change Request

Date Submitted: 09/28/18 8:53 am

Viewing: **BIO SCI 1982 ~~1993~~ : Introduction to Biomedical Problems**

File: 2032.1

Last edit: 10/15/18 2:28 pm

Changes proposed by: shannonk

Requested **Spring 2019** ~~08/01/2014~~

Effective Change

Date

Department Biological Sciences

Discipline Biological Sciences (BIO SCI)

Course Number **1982** ~~1993~~

Title

Introduction to Biomedical Problems

Abbreviated Intro to Biomed Problems

Course Title

Catalog

Description

In Workflow

1. **RBIOLSCI Chair**
2. **CCC Secretary**
3. **Sciences DSCC Chair**
4. **Pending CCC Agenda post**
5. **CCC Meeting Agenda**
6. Campus Curricula Committee Chair
7. FS Meeting Agenda
8. Faculty Senate Chair
9. Registrar
10. CAT entry
11. Peoplesoft

Approval Path

1. 09/28/18 8:56 am
David Duvernell (duvernell):
Approved for
RBIOLSCI Chair
2. 09/28/18 10:06 am
Brittany Parnell (ershenb):

Approved for CCC
Secretary

3. 10/16/18 11:42
am

Katie Shannon
(shannonk):
Approved for
Sciences DSCC
Chair

4. 10/16/18 12:01
pm

Brittany Parnell
(ershenb):
Approved for
Pending CCC
Agenda post

Problem based learning approach to issues in medical science. Students will work in groups and individually to answer problems related to diagnostic testing and evaluation of diseases and other medical conditions.

Prerequisites

~~Bio-Sci 1953.~~

Field Trip

Statement

Credit Hours

LEC: 3

LAB: 0

IND: 0

RSD: 0

Total: 3

Required for

No

Majors

Elective for

Yes ~~No~~

Majors

Justification for
change:

Course number should be lower than 1983, remove prereq that is no longer required

Semesters

previously

offered as an

experimental

course

Co-Listed

Courses:

Course Reviewer

Comments

Key: 2032

[Preview Bridge](#)

Course Change Request

Date Submitted: 09/07/18 5:01 pm

Viewing: **CIV ENG 5513 : Traffic Engineering**

File: 1186.1

Last edit: 10/05/18 9:29 am

Changes proposed by: huxian

Other Courses
referencing this
course

In The Prerequisites:

[CIV ENG 5515 : Advanced Traffic Operations and Capacity](#)

[Analysis](#)

[CIV ENG 6501 : Transportation Planning](#)

[CIV ENG 6505 : Traffic Modeling and Simulation](#)

[CIV ENG 6509 : Traffic Flow Theory and Characteristics](#)

[CIV ENG 6511 : Transportation Systems Analysis](#)

Requested **Fall 2019 08/14/2018**

Effective Change

Date

Department Civil, Architectural, and Environmental Engineering

Discipline Civil Engineering (CIV ENG)

Course Number 5513

Title

Traffic Engineering

Abbreviated Traffic Engineering

Course Title

In Workflow

1. **RCIVILEN Chair**
2. **CCC Secretary**
3. **Engineering DSCC
Chair**
4. **Pending CCC
Agenda post**
5. **CCC Meeting
Agenda**
6. Campus Curricula
Committee Chair
7. FS Meeting
Agenda
8. Faculty Senate
Chair
9. Registrar
10. CAT entry
11. Peoplesoft

Approval Path

1. 09/24/18 5:54 am
Joel Burken
(burken):
Approved for
RCIVILEN Chair
2. 09/24/18 11:29
am
Brittany Parnell
(ershenb):

Catalog
Description

Approved for CCC Secretary
3. 10/08/18 12:35 pm
Stephen Raper (sraper):
Approved for Engineering DSCC Chair
4. 10/08/18 2:16 pm
Brittany Parnell (ershenb):
Approved for Pending CCC Agenda post

Introduction to multimodal transportation systems and the factors that influence the planning, design, control, operation and safety of the systems will be made. This course will also include the discussion of Intelligence Transportation Systems and how emerging technologies are changing transportation systems. ~~Driver, vehicle, and roadway characteristics; traffic control devices; traffic studies; intersection capacity, intersection design, traffic safety, and evaluation of traffic improvements. Traffic laws and ordinances, traffic engineering, traffic circulation, parking design, and forecasting traffic impacts.~~

Prerequisites

Civ Eng 3500 with a grade of "C" or better.

Field Trip

Statement

Credit Hours	LEC: 3	LAB: 0	IND: 0	RSD: 0	Total: 3
Required for Majors	No				
Elective for Majors	Yes No				

Justification for
change:

Instructor of this course has changed to be a TT faculty, who is systematically redesigning this course and reorganizing the content into five modules, including planning, design, control, operation and safety

Semesters
previously
offered as an
experimental
course

Co-Listed
Courses:

Course Reviewer
Comments

sraper (09/27/18 9:13 am): checked elective for majors.

Key: 1186

[Preview Bridge](#)

Course Change Request

Date Submitted: 09/07/18 5:02 pm

Viewing: **CIV ENG 5515 : Advanced Traffic Operations and Capacity Analysis**

File: 4070.15

Last approved: 02/05/18 3:29 am

Last edit: 10/05/18 9:30 am

Changes proposed by: huxian

Requested **Fall 2019** ~~08/14/2018~~

Effective Change

Date

Department Civil, Architectural, and Environmental Engineering

Discipline Civil Engineering (CIV ENG)

Course Number 5515

Title

Advanced Traffic Operations and Capacity Analysis

Abbreviated Adv Traf Ops **and & CA Anly**

Course Title ~~Anlys~~

Catalog

Description

In Workflow

1. **RCIVILEN Chair**
2. **CCC Secretary**
3. **Engineering DSCC Chair**
4. **Pending CCC Agenda post**
5. **CCC Meeting Agenda**
6. Campus Curricula Committee Chair
7. FS Meeting Agenda
8. Faculty Senate Chair
9. Registrar
10. CAT entry
11. Peoplesoft

Approval Path

1. 09/24/18 5:54 am
Joel Burken
(burken):
Approved for
RCIVILEN Chair
2. 09/24/18 11:28 am
Brittany Parnell
(ershenb):

Approved for CCC
Secretary

3. 10/08/18 12:36
pm

Stephen Raper
(sraper):

Approved for
Engineering DSCC
Chair

4. 10/08/18 2:17 pm
Brittany Parnell

(ershenb):

Approved for
Pending CCC
Agenda post

History

1. Sep 22, 2014 by
Debbie Benenati
(dbenenat)
2. Feb 5, 2018 by
seelyj (4070.7)

This course will introduce students to advanced traffic operation and capacity analysis as applied to an urban highway network. It will focus on the operations and management of freeway and arterials where a signalized intersection is one of the key elements affecting traffic flow operation and determining highway capacity.

Prerequisites

Civ Eng 3500 with a grade of "C" or better. ~~Civ Eng 5513.~~

Field Trip

Statement

Credit Hours

LEC: 3

LAB: 0

IND: 0

RSD: 0

Total: 3

Required for Majors	No
Elective for Majors	Yes

Justification for
change:

Both CIV_ENG 5513 and 5515 are being redesigned by new transportation faculty, with different focuses. CIV_ENG 5513 will aim to provide a holistic view of traffic engineering, while CIV_ENG 5515 will focus on traffic operation and capacity analysis. With this, it is not necessary for students to take CIV_ENG 5513 prior to taking this course. Additionally, the enrollment of 5515 is usually low due to this prerequisite requirement, hopefully we can attract more students' interest in transportation engineering and better serve employer's needs

Semesters
previously
offered as an
experimental
course

Co-Listed
Courses:

Course Reviewer

Comments

sraper (09/25/18 9:09 am): added CE 3500 as prerequisite course per instructions from Civ Eng.

sraper (09/26/18 9:35 am): changed prereq according to instructor email.

Course Change Request

New Course Proposal

Date Submitted: 09/12/18 10:20 am

Viewing: **EDUC 3290 : Coordination of**

Cooperative Education

File: 4562

Last edit: 09/12/18 2:54 pm

Changes proposed by: barryf

Programs
referencing this
course

[BUS&MS-BS: Business and Mgmt Systems BS](#)

Requested	Spring 2019
Effective Change	
Date	
Department	Teacher Education and Certification
Discipline	Education (EDUC)
Course Number	3290
Title	Coordination of Cooperative Education
Abbreviated	Coord Coop Education
Course Title	

Catalog
Description

In Workflow

1. **REDUCATION Chair**
2. **CCC Secretary**
3. **Social Sciences DSCC Chair**
4. **Pending CCC Agenda post**
5. **CCC Meeting Agenda**
6. Campus Curricula Committee Chair
7. FS Meeting Agenda
8. Faculty Senate Chair
9. Registrar
10. CAT entry
11. Peoplesoft

Approval Path

1. 09/12/18 10:25 am
Kelly Carter (carterke):
Approved for REDUCATION Chair
2. 09/12/18 2:58 pm
Brittany Parnell

(ershenb):

Approved for CCC
Secretary

3. 09/25/18 9:05 pm

Barry Flachsbart

(barryf):

Approved for
Social Sciences
DSCC Chair

4. 10/08/18 2:22 pm

Brittany Parnell

(ershenb):

Approved for
Pending CCC
Agenda post

Explore the coordination and delivery of work-based learning experiences for student learners, including legal aspects, methods, materials, selecting work sites, placement, evaluation of expectations and student follow-up. Develop an implementation plan for cooperative education.

Prerequisites

Educ 1040, Educ 1104, Educ 1174.

Field Trip

Statement

Credit Hours	LEC: 3	LAB: 0	IND: 0	RSD: 0	Total: 3
Required for Majors	Yes				
Elective for Majors	No				

Justification for
new course:

This course is a requirement of the Missouri Department of Elementary and Secondary Education for certification to teach Business Education at the high school level.

Semesters
previously
offered as an
experimental
course

Co-Listed
Courses:

Course Reviewer
Comments

Key: 4562

[Preview Bridge](#)

Course Change Request

Date Submitted: 10/12/18 10:19 am

Viewing: **ENGLISH 2243 : Science Fiction ~~And Fantasy Literature~~**

File: 1314.1

Last edit: 10/12/18 11:23 am

Changes proposed by: kswenson

Requested	Fall 2019 08/14/2018
Effective Change Date	
Department	English and Technical Communication
Discipline	English (ENGLISH)
Course Number	2243
Title	Science Fiction And Fantasy Literature
Abbreviated Course Title	Sci Fiction Fiction&Fantasy Lit

Catalog
Description

In Workflow

1. **RENGLISH Chair**
2. **CCC Secretary**
3. **Arts & Humanities DSCC Chair**
4. **Pending CCC Agenda post**
5. **CCC Meeting Agenda**
6. Campus Curricula Committee Chair
7. FS Meeting Agenda
8. Faculty Senate Chair
9. Registrar
10. CAT entry
11. Peoplesoft

Approval Path

1. 10/12/18 10:19 am
Kristine Swenson (kswenson):
Approved for
RENGLISH Chair
2. 10/12/18 11:24 am
Brittany Parnell

(ershenb):

Approved for CCC
Secretary3. 10/12/18 12:04
pm

Petra Dewitt

(dewittp):

Approved for Arts
& Humanities
DSCC Chair4. 10/16/18 9:18 am
Brittany Parnell

(ershenb):

Approved for
Pending CCC
Agenda post

A study of short stories, poems, or novels which represent the development and the techniques of the science **fiction** ~~fiction-fantasy~~ genre.

Prerequisites

English 1120 and a semester of college literature.

Field Trip

Statement

Credit Hours	LEC: 3	LAB: 0	IND: 0	RSD: 0
--------------	--------	--------	--------	--------

Total: 3

Required for Majors	No
------------------------	----

Elective for Majors	No
------------------------	----

Justification for
change:

We have a separate "Fantasy Literature" course, so 2243 is now simply Science Fiction and including "fantasy" in the title is misleading, inaccurate, unnecessary.

Semesters

previously

offered as an

experimental

course

Co-Listed

Courses:

Course Reviewer

Comments

Key: 1314

[Preview Bridge](#)

Course Change Request

Date Submitted: 09/14/18 3:51 pm

Viewing: **EXP ENG 5914 : Explosives**

Manufacturing

File: 4379.5

Last approved: 03/20/17 3:14 am

Last edit: 09/27/18 9:15 am

Changes proposed by: pworsey

Catalog Pages
referencing this
course

[Explosives Engineering](#)

[Explosives Engineering](#)

Requested	Spring 2019 Fall 2017
Effective Change Date	
Department	Mining & Nuclear Engineering
Discipline	Explosives Engineering (EXP ENG)
Course Number	5914
Title	Explosives Manufacturing
Abbreviated Course Title	Explosives Manufacturing

Catalog
Description

In Workflow

1. **MINEXP ENG
Chair**
2. **CCC Secretary**
3. **Engineering DSCC
Chair**
4. **Pending CCC
Agenda post**
5. **CCC Meeting
Agenda**
6. Campus Curricula
Committee Chair
7. FS Meeting
Agenda
8. Faculty Senate
Chair
9. Registrar
10. CAT entry
11. Peoplesoft

Approval Path

1. 09/15/18 1:50 pm
Kwame Awuah-
Offei (kwamea):
Approved for
MINEXP ENG
Chair
2. 09/18/18 9:42 am
Brittany Parnell
(ershenb):

Approved for CCC
Secretary

3. 10/08/18 12:36
pm

Stephen Raper
(sraper):

Approved for
Engineering DSCC
Chair

4. 10/08/18 2:23 pm

Brittany Parnell
(ershenb):

Approved for
Pending CCC
Agenda post

History

1. Mar 20, 2017 by
Kyle Perry
(kapqh4)

History of industrial explosives from discovery to what is used today. Manufacturing processes for packaged and bulk explosives are explored along with specialty explosives such as detonating cord, cast boosters, detonators, shaped charges, and commercial fireworks. Field manufacturing of explosives by mixing or gassing is also covered.

Prerequisites

Successful background check, consent of instructor.

Field Trip

Statement

Credit Hours

LEC: 3

LAB: 0

IND: 0

RSD: 0

Total: 3

Required for

No ~~Yes~~

Majors

Elective for Yes
Majors

Justification for
change:

In order to make sure students have a successful background check before taking the course, this and consent of instructor has been added as a prerequisite so that students need a permission number before they can enroll for the class. Once they have a background check file they will be approved so that they remain in the class.

Semesters
previously
offered as an
experimental
course

Co-Listed
Courses:

Course Reviewer

Comments

sraper (09/27/18 9:15 am): removed required for majors.

Key: 4379

[Preview Bridge](#)

Course Change Request

Date Submitted: 09/13/18 9:44 am

Viewing: **FINANCE 5310 : Financial Technology and Analytics** ~~Financial Modeling~~

File: 4499.4

Last approved: 02/05/18 3:29 am

Last edit: 09/13/18 9:44 am

Changes proposed by: ershenb

Catalog Pages
referencing this
course

[Business Administration](#)

Requested	Spring 2019 08/14/2018
Effective Change Date	
Department	Business and Information Technology
Discipline	Finance (FINANCE)
Course Number	5310
Title	Financial Technology and Analytics Financial Modeling
Abbreviated Course Title	Tech and Analytics Financial Modeling

Catalog
Description

In Workflow

1. **RBUSADMN**
Chair
2. **CCC Secretary**
3. **Social Sciences**
DSCC Chair
4. **Pending CCC**
Agenda post
5. **CCC Meeting**
Agenda
6. Campus Curricula
Committee Chair
7. FS Meeting
Agenda
8. Faculty Senate
Chair
9. Registrar
10. CAT entry
11. Peoplesoft

Approval Path

1. 09/13/18 12:40 pm
siauk: Approved for RBUSADMN Chair
2. 09/13/18 1:26 pm
Brittany Parnell (ershenb):

Approved for CCC
Secretary

3. 09/25/18 9:05 pm

Barry Flachsbart
(barryf):

Approved for
Social Sciences
DSCC Chair

4. 10/08/18 3:17 pm

Brittany Parnell
(ershenb):

Approved for
Pending CCC
Agenda post

History

1. Feb 5, 2018 by
Barry Flachsbart
(barryf)

This course is built on finance theory, financial analysis, and quantitative methods from prerequisite courses. **Students** ~~The course~~ will ~~extensively use Excel spreadsheets to~~ design and construct integrated financial models. The objective is to offer students opportunities to experience hands-on numerical analyses, company valuation, and dynamic projections.

Prerequisites

Finance 2150 or Graduate Standing.

Field Trip

Statement

Credit Hours	LEC: 3	LAB: 0	IND: 0	RSD: 0	Total: 3
Required for Majors	No				

Elective for Yes
Majors

Justification for
change:

Instructor suggested description and title changes to more accurately describe the course.

Semesters
previously
offered as an
experimental
course

Co-Listed
Courses:

Course Reviewer
Comments

Key: 4499

[Preview Bridge](#)

Course Change Request

Date Submitted: 09/26/18 4:08 pm

Viewing: **GEOLOGY 4630 ~~3631~~ : Systematic Paleontology**

File: 1211.10

Last approved: 03/26/18 3:33 am

Last edit: 09/28/18 10:58 am

Changes proposed by: ershenb

Requested **Fall 2019 ~~08/14/2018~~**

Effective Change

Date

Department Geosciences and Geological and Petroleum Engineering

Discipline Geology (GEOLOGY)

Course Number **4630 ~~3631~~**

Title

Systematic Paleontology

Abbreviated Systematic Paleontology

Course Title

Catalog

Description

In Workflow

1. **RGEOSENG Chair**
2. **CCC Secretary**
3. **Sciences DSCC Chair**
4. **Pending CCC Agenda post**
5. **CCC Meeting Agenda**
6. Campus Curricula Committee Chair
7. FS Meeting Agenda
8. Faculty Senate Chair
9. Registrar
10. CAT entry
11. Peoplesoft

Approval Path

1. 10/01/18 8:06 am
David Borrok (borrokd):
Approved for
RGEOSENG Chair
2. 10/01/18 9:27 am
Brittany Parnell (ershenb):
Approved for CCC
Secretary

3. 10/16/18 11:45 am
Katie Shannon (shannonk):
Approved for Sciences DSCC Chair
4. 10/16/18 12:02 pm
Brittany Parnell (ershenb):
Approved for Pending CCC Agenda post

History

1. Jun 27, 2016 by ikuenobe (1211.1)
2. Mar 26, 2018 by ikuenobe (1211.6)

Provide understanding of paleontological principles, morphological concepts, evolution of life, and applications/uses of fossils. Chronicles evolution and classification of microfossils, invertebrates, plants and palynomorphs. Emphasis on **communication skills** ~~writing~~ and **team work**. ~~oral skills~~. A compulsory field trip to The Field Museum (Chicago) may be at student expense.

Prerequisites

Geology 1110 or Geology 1120 or Bio Sci **1113, or consent of instructor.** ~~1113.~~

Field Trip

Statement

Credit Hours

LEC: 2

LAB: 1

IND: 0

RSD: 0

Total: 3

Required for Majors	No
Elective for Majors	Yes

Justification for
change:

The lecture and lab section of this course have been substantially revised to include intensive communication components, and is more aligned to a senior-level course.

Semesters
previously
offered as an
experimental
course

Co-Listed
Courses:

Course Reviewer

Comments

ershenb (09/26/18 4:14 pm): Changed course number to "4630,"; edited description with "Emphasis on communication skills and teamwork."; added " or consent of instructor" to prerequisite per the request of Francisca Oboh-Ikuenobe (for technical Courseleaf issues).

Key: 1211

[Preview Bridge](#)

Course Change Request

A deleted record cannot be edited

Course Deactivation Proposal

Date Submitted: 06/06/18 3:35 pm

Viewing: **NUC ENG 4365 : Radiation Protection Engineering**

File: 2420.1

Last edit: 08/14/18 2:26 pm

Changes proposed by: tibbettsmg

Requested	Spring 2019 08/01/2014
Effective Change Date	
Department	Mining & Nuclear Engineering
Discipline	Nuclear Engineering (NUC ENG)
Course Number	4365
Title	Radiation Protection Engineering
Abbreviated Course Title	Radiation Protection Eng

Catalog Description

In Workflow

1. **NUC ENG Chair**
2. **CCC Secretary**
3. **Engineering DSCC Chair**
4. **Pending CCC Agenda post**
5. **CCC Meeting Agenda**
6. Campus Curricula Committee Chair
7. FS Meeting Agenda
8. Faculty Senate Chair
9. Registrar
10. CAT entry
11. Peoplesoft

Approval Path

1. 09/25/18 2:21 pm
Hyoung-Koo Lee (leehk): Approved for NUC ENG Chair
2. 09/25/18 3:15 pm
Brittany Parnell (ershenb):

Approved for CCC
Secretary

3. 10/08/18 12:36
pm

Stephen Raper
(sraper):

Approved for
Engineering DSCC
Chair

4. 10/08/18 3:37 pm
Brittany Parnell

(ershenb):

Approved for
Pending CCC
Agenda post

Radiation fields and sources including nuclear reactors, radioactive wastes, x-ray machines, and accelerators. Stopping of radiation (Charges particles, photons, and neutrons) by matter. Radiation transport methods. Radiation shielding design. Dose rate calculations. Biological effects of radiation. Regulatory guides (10CFR20).

Prerequisites

Nuc Eng 3205.

Field Trip

Statement

Credit Hours	LEC: 3	LAB: 0	IND: 0	RSD: 0	Total: 3
Required for Majors	No				
Elective for Majors	No				

Justification for change:

Elimination of courses that have not been taught for 10 or more years per Registrar.

Semesters
previously
offered as an
experimental
course

Co-Listed
Courses:

Course Reviewer
Comments

Key: 2420

[Preview Bridge](#)

Course Change Request

A deleted record cannot be edited

Course Deactivation Proposal

Date Submitted: 06/06/18 3:36 pm

Viewing: **NUC ENG 6211 : Computational**

Methods In Nuclear Engineering

File: 424.1

Last edit: 08/14/18 2:26 pm

Changes proposed by: tibbettsmg

Requested	Spring 2019 08/01/2014
Effective Change Date	
Department	Mining & Nuclear Engineering
Discipline	Nuclear Engineering (NUC ENG)
Course Number	6211
Title	Computational Methods In Nuclear Engineering
Abbreviated Course Title	Comp Mthds In Nucl Engr

Catalog Description

In Workflow

1. **NUC ENG Chair**
2. **CCC Secretary**
3. **Engineering DSCC Chair**
4. **Pending CCC Agenda post**
5. **CCC Meeting Agenda**
6. Campus Curricula Committee Chair
7. FS Meeting Agenda
8. Faculty Senate Chair
9. Registrar
10. CAT entry
11. Peoplesoft

Approval Path

1. 09/25/18 2:21 pm
Hyoung-Koo Lee (leehk): Approved for NUC ENG Chair
2. 09/25/18 3:15 pm
Brittany Parnell (ershenb):

Approved for CCC
Secretary

3. 10/08/18 12:37
pm

Stephen Raper
(sraper):

Approved for
Engineering DSCC
Chair

4. 10/08/18 3:37 pm
Brittany Parnell

(ershenb):

Approved for
Pending CCC
Agenda post

Numerical solution of the neutron diffusion and transport equations utilizing the computer. The Sn and Pn methods are studied in detail.

Prerequisites

Nuc Eng 4211 and Comp Sci 3200.

Field Trip

Statement

Credit Hours	LEC: 3	LAB: 0	IND: 0	RSD: 0	Total: 3
Required for Majors	No				
Elective for Majors	No				

Justification for change:

Elimination of courses that have not been taught for 10 or more years per Registrar.

Semesters previously

offered as an
experimental
course

Co-Listed
Courses:

Course Reviewer
Comments

Key: 424

[Preview Bridge](#)

Course Change Request

A deleted record cannot be edited

Course Deactivation Proposal

Date Submitted: 06/06/18 3:36 pm

Viewing: **NUC ENG 6221 : Advanced Nuclear Reactor Design**

File: 2033.1

Last edit: 08/14/18 2:26 pm

Changes proposed by: tibbettsmg

Requested	Spring 2019 08/01/2014
Effective Change Date	
Department	Mining & Nuclear Engineering
Discipline	Nuclear Engineering (NUC ENG)
Course Number	6221
Title	Advanced Nuclear Reactor Design
Abbreviated Course Title	Adv Nuc Reactor Design

Catalog Description

In Workflow

1. **NUC ENG Chair**
2. **CCC Secretary**
3. **Engineering DSCC Chair**
4. **Pending CCC Agenda post**
5. **CCC Meeting Agenda**
6. Campus Curricula Committee Chair
7. FS Meeting Agenda
8. Faculty Senate Chair
9. Registrar
10. CAT entry
11. Peoplesoft

Approval Path

1. 09/25/18 2:22 pm
Hyoung-Koo Lee (leehk): Approved for NUC ENG Chair
2. 09/25/18 3:15 pm
Brittany Parnell (ershenb):

Approved for CCC
Secretary

3. 10/08/18 12:37
pm

Stephen Raper
(sraper):

Approved for
Engineering DSCC
Chair

4. 10/08/18 3:37 pm

Brittany Parnell
(ershenb):

Approved for
Pending CCC
Agenda post

Complete design of a nuclear power reactor, including analysis of reactor physics and engineering; layout and design of primary and secondary cooling systems, pressure vessel and thermal shields, control systems; introduction to the economics of nuclear power.

Prerequisites

Nuc Eng 4211 and 3229.

Field Trip

Statement

Credit Hours	LEC: 3	LAB: 0	IND: 0	RSD: 0	Total: 3
Required for Majors	No				
Elective for Majors	No				

Justification for change:

Elimination of courses that have not been taught for 10 or more years per Registrar.

Semesters
previously
offered as an
experimental
course

Co-Listed
Courses:

Course Reviewer
Comments

Key: 2033

[Preview Bridge](#)

Course Change Request

A deleted record cannot be edited

Course Deactivation Proposal

Date Submitted: 06/06/18 3:36 pm

Viewing: **NUC ENG 6281 : Probabilistic Risk Assessment II**

File: 738.1

Last edit: 08/14/18 2:27 pm

Changes proposed by: tibbettsmg

Requested	Spring 2019 08/01/2014
Effective Change Date	
Department	Mining & Nuclear Engineering
Discipline	Nuclear Engineering (NUC ENG)
Course Number	6281
Title	Probabilistic Risk Assessment II
Abbreviated Course Title	Prob Risk Assessment II

Catalog Description

In Workflow

1. **NUC ENG Chair**
2. **CCC Secretary**
3. **Engineering DSCC Chair**
4. **Pending CCC Agenda post**
5. **CCC Meeting Agenda**
6. Campus Curricula Committee Chair
7. FS Meeting Agenda
8. Faculty Senate Chair
9. Registrar
10. CAT entry
11. Peoplesoft

Approval Path

1. 09/25/18 2:22 pm
Hyoung-Koo Lee (leehk): Approved for NUC ENG Chair
2. 09/25/18 3:15 pm
Brittany Parnell (ershenb):

Approved for CCC
Secretary

3. 10/08/18 12:37
pm

Stephen Raper
(sraper):

Approved for
Engineering DSCC
Chair

4. 10/08/18 3:38 pm
Brittany Parnell

(ershenb):

Approved for
Pending CCC
Agenda post

A continuation of Nuc Eng 4281 with emphasis on reliability, importance, availability and frequency of occurrence. Advanced topics of phased mission analysis and dynamic fault tree analysis will be considered. The use of fault tree results with respect to risk calculations will be studied.

Prerequisites

Nuc Eng 4281.

Field Trip

Statement

Credit Hours	LEC: 3	LAB: 0	IND: 0	RSD: 0	Total: 3
Required for Majors	No				
Elective for Majors	No				

Justification for
change:

Elimination of courses that have not been taught for 10 or more years per Registrar.

Semesters
previously
offered as an
experimental
course

Co-Listed
Courses:

Course Reviewer
Comments

Key: 738

[Preview Bridge](#)

Course Change Request

New Experimental Course Proposal

Date Submitted: 09/24/18 2:13 pm

Viewing: **BIO SCI 5001.003 : Forest Insect Diversity & Ecology**

File: 4573

Last edit: 10/16/18 1:10 pm

Changes proposed by: verbler

Requested	Summer 2019
Effective Change Date	
Department	Biological Sciences
Discipline	Biological Sciences (BIO SCI)
Course Number	5001
Topic ID	003
Experimental Title	Forest Insect Diversity & Ecology
Experimental Abbreviated Course Title	Insect Div and Ecol
Instructors	Dr. Robin Verble

Experimental Catalog Description

In Workflow

1. **RBIOLSCI Chair**
2. **CCC Secretary**
3. **Sciences DSCC Chair**
4. **Pending CCC Agenda post**
5. **CCC Meeting Agenda**
6. Campus Curricula Committee Chair
7. CAT entry
8. Registrar

Approval Path

1. 09/24/18 2:28 pm
David Duvernell (duvernellid):
Approved for
RBIOLSCI Chair
2. 09/24/18 3:34 pm
Brittany Parnell (ershenb):
Approved for CCC
Secretary
3. 10/16/18 11:42 am
Katie Shannon (shannonk):
Approved for

Sciences DSCC
Chair

4. 10/16/18 12:01
pm

Brittany Parnell
(ershenb):

Approved for
Pending CCC
Agenda post

In this course, you will learn key insect characteristics, common forest insects, insect life history and ecology, and entomological collection techniques. This course will be taught at the Ozark Research Field Station and will consist of several field trips to collecting sites and laboratory identification of insects.

Prerequisites

Bio Sci 2263

Field Trip

Statement

This course will be held at the Ozark Field Research Station in Newburg, Missouri. Students are expected to provide their own transportation to and from the Station.

Credit Hours

LEC: 1

LAB: 2

IND: 0

RSD: 0

Total: 3

Justification for

new course:

This course increases the summer offerings for the Department of Biological Sciences and utilizes the new Ozark Research Field Station. In addition, this course diversifies the offerings in the Department and addresses ecological, organismal, and field-based topics, thus strengthening our overall program.

Semester(s)

previously taught

None at Missouri S&T. Taught a similar course at Texas Tech University for three semesters.

Co-Listed

Courses:

Course Reviewer

Comments

Key: 4573

[Preview Bridge](#)

Course Change Request

New Experimental Course Proposal

Date Submitted: 09/26/18 8:13 am

Viewing: **CER ENG 3001.001 : Engineering Leadership and Case Studies in Materials Engineering**

File: 4574

Last edit: 10/08/18 2:15 pm

Changes proposed by: schwartzrob

Requested Spring 2019

Effective Change

Date

Department Materials Science & Engineering

Discipline Ceramic Engineering (CER ENG)

Course Number 3001

Topic ID 001

Experimental

Title

Engineering Leadership and Case Studies in Materials Engineering

Experimental Materials Case Studies

Abbreviated

Course Title

Instructors Robert W. Schwartz

Experimental

Catalog

Description

In Workflow

1. **RMATSENG Chair**
2. **CCC Secretary**
3. **Engineering DSCC Chair**
4. **Pending CCC Agenda post**
5. **CCC Meeting Agenda**
6. Campus Curricula Committee Chair
7. CAT entry
8. Registrar

Approval Path

1. 09/26/18 8:14 am
Greg Hilmas (ghilmas):
Approved for RMATSENG Chair
2. 09/26/18 8:49 am
Brittany Parnell (ershenb):
Approved for CCC Secretary
3. 10/08/18 12:34 pm
Stephen Raper (sraper):
Approved for

Engineering DSCC
Chair

4. 10/08/18 2:15 pm

Brittany Parnell

(ershenb):

Approved for

Pending CCC

Agenda post

The application of materials engineering principles to materials development with a focus on real-world materials applications. Case studies of materials engineering development challenges and leadership in engineering organizations will be used to develop a comprehensive perspective of societal, environmental, global, and economic influences.

Prerequisites

Junior Standing in ceramic or metallurgical engineering.

Field Trip

Statement

Credit Hours	LEC: 3.0	LAB: 0.0	IND: 0.0	RSD: 0.0	Total: 3.0
--------------	----------	----------	----------	----------	------------

Justification for

new course:

The existing capstone design course is an avenue for students to further develop as engineers and put together what they have learned in their earlier courses to begin to solve more complex engineering problems. While the course contributes to the attainment of these objectives, the focus on a specific and narrow design project does not enable the students to gain the broad perspective needed to perform effectively from day one at the level expected by employers. This course will thus supplement the current required senior design course and provide an avenue for students who take this elective course to further develop their professional abilities across the spectrum of ABET and HLC/Missouri S&T campus-wide student learning outcomes.

Semester(s)

previously taught

None.

Co-Listed

Courses:

Course Reviewer

Comments

sraper (10/08/18 12:34 pm): Removed last part of prereq statement.

Key: 4574

[Preview Bridge](#)

Course Change Request

New Experimental Course Proposal

Date Submitted: 09/05/18 8:09 am

Viewing: **ECON 3001.002 : Advancing Innovation in Rural Economic Ecosystems**

File: 4565

Last edit: 09/26/18 9:03 am

Changes proposed by: schwartzrob

Requested	Spring 2019
Effective Change Date	
Department	Economics
Discipline	Economics (ECON)
Course Number	3001
Topic ID	002
Experimental Title	Advancing Innovation in Rural Economic Ecosystems
Experimental Abbreviated Course Title	Innovate in Rural Areas
Instructors	Robert Schwartz, Bonnie Bachman and Caprice Moore

Experimental Catalog Description

In Workflow

1. **RECONOMI Chair**
2. **CCC Secretary**
3. **Social Sciences DSCC Chair**
4. **Pending CCC Agenda post**
5. **CCC Meeting Agenda**
6. Campus Curricula Committee Chair
7. CAT entry
8. Registrar

Approval Path

1. 09/18/18 1:20 pm
Gregory Gelles (gelles): Approved for RECONOMI Chair
2. 09/18/18 1:41 pm
Brittany Parnell (ershenb): Approved for CCC Secretary
3. 09/25/18 9:06 pm
Barry Flachsbart (barryf): Approved for

Social Sciences

DSCC Chair

4. 09/26/18 9:01 am

Brittany Parnell

(ershenb):

Approved for

Pending CCC

Agenda post

5. 09/26/18 9:03 am

Brittany Parnell

(ershenb):

Rollback to

Pending CCC

Agenda post for

CCC Meeting

Agenda

6. 10/08/18 2:20 pm

Brittany Parnell

(ershenb):

Approved for

Pending CCC

Agenda post

This experiential learning course allows students to perform a local ecosystem map and/or further develop an innovation (including their own) in a rural Missouri community. Course instructors identify host communities to facilitate partnerships with local business leaders to enable student progress on commercialization of the innovation.

Prerequisites

Have completed at least one of the following: Econ 1100, Econ 1200 or Eng Mgt 1210; Permission of instructor. It is recommended, but not required, that students seeking to enroll in the course will have completed one of the courses in the Applied Innovation Minor and/or a communications course.

Field Trip

Statement

While there are no formal field trips, students complete their independent study off-campus in a rural community in Missouri.

Credit Hours

LEC: 1.0

LAB: 0

IND: 1 - 2

RSD: 0

Total: 2 - 3

Justification for

new course:

The development of this course is funded by a grant from VentureWell to enable the development of student-driven innovations in rural settings. It will provide a unique opportunity for students interested in innovation to learn about rural economic ecosystems and to further develop their innovative concepts in a rural setting, meeting the need for economic development in these regions of the state. There are no similar courses offered at Missouri S&T, our sister campuses, or elsewhere. A course in Rural Entrepreneurship is offered at MU, but the proposed course is focused on aiding students in furthering their own technical innovations. The course will complement courses being developed for the Applied Innovation Minor offered through the Economics department.

Semester(s)

previously taught

None

Please note - the course should be co-listed in ENG MGT as a 3001 experimental course.

Co-Listed

Courses:

Eng Mgt 3001 - **Course Not Found**

Course Reviewer

Comments

ershenb (09/26/18 9:03 am): Rollback: .

Course Change Request

New Experimental Course Proposal

Date Submitted: 09/19/18 9:46 am

Viewing: **GEO ENG 5001.003 : Geological and Civil Engineering Issues in Southern Africa**

File: 4572

Last edit: 10/08/18 3:31 pm

Changes proposed by: nanders

Requested Spring 2019

Effective Change

Date

Department Geosciences and Geological and Petroleum Engineering

Discipline Geological Engineering (GEO ENG)

Course Number 5001

Topic ID 003

Experimental

Title

Geological and Civil Engineering Issues in Southern Africa

Experimental Engineering in Africa

Abbreviated

Course Title

Instructors Neil Anderson and Eric Showalter

Experimental

Catalog

Description

In Workflow

1. **RGEOSENG Chair**

2. **CCC Secretary**

3. **Engineering DSCC Chair**

4. **Pending CCC Agenda post**

5. **CCC Meeting Agenda**

6. **Campus Curricula Committee Chair**

7. **CAT entry**

8. **Registrar**

Approval Path

1. 09/19/18 11:12 am

David Borrok (borrokd):

Approved for RGEOSENG Chair

2. 09/19/18 3:46 pm

Brittany Parnell (ershenb):

Approved for CCC Secretary

3. 10/08/18 12:36

pm

Stephen Raper (sraper):

Approved for
Engineering DSCC
Chair

4. 10/08/18 3:32 pm

Brittany Parnell
(ershenb):

Approved for
Pending CCC
Agenda post

Registrants will travel to southern Africa and will visit sites, people and institutions with a view to learning about geological and civil engineering issues in southern Africa. Emphasis will be placed issues related to mining, water resources and the environment in countries where water, in places, is in short supply.

Prerequisites

Permission of instructor.

Field Trip

Statement

A field trip to southern Africa is a course requirement.

Credit Hours	LEC: 3	LAB: 0	IND: 0	RSD: 0	Total: 3
--------------	--------	--------	--------	--------	----------

Justification for

new course:

This is an experiential learning course.

Semester(s)

previously taught

Offered previously (twice) as GE 5001 (or equivalent).

Co-Listed

Courses:

CIV ENG 5001 - Special Topics

Course Reviewer

Comments

Course Change Request

New Experimental Course Proposal

Date Submitted: 09/19/18 9:41 am

Viewing: **GEO ENG 6001.002 : Geological and Civil Engineering Practices in Southern Africa**

File: 4571

Last edit: 10/08/18 3:32 pm

Changes proposed by: nanders

Requested	Spring 2019
Effective Change Date	
Department	Geosciences and Geological and Petroleum Engineering
Discipline	Geological Engineering (GEO ENG)
Course Number	6001
Topic ID	002
Experimental Title	Geological and Civil Engineering Practices in Southern Africa
Experimental Abbreviated Course Title	Eng Practices in Africa
Instructors	Neil Anderson and Eric Showalter

Experimental Catalog Description

In Workflow

1. **RGEOSENG Chair**
2. **CCC Secretary**
3. **Engineering DSCC Chair**
4. **Pending CCC Agenda post**
5. **CCC Meeting Agenda**
6. Campus Curricula Committee Chair
7. CAT entry
8. Registrar

Approval Path

1. 09/19/18 11:12 am
David Borrok (borrokd):
Approved for RGEOSENG Chair
2. 09/19/18 3:49 pm
Brittany Parnell (ershenb):
Approved for CCC Secretary
3. 10/08/18 12:36 pm
Stephen Raper (sraper):

Approved for
Engineering DSCC
Chair

4. 10/08/18 3:33 pm

Brittany Parnell
(ershenb):

Approved for
Pending CCC
Agenda post

Registrants will travel to southern Africa and will visit sites, people and institutions with a view to learning about geological and civil engineering practices in southern Africa. Emphasis will be placed on construction, mining and environmental practices in countries where the cost of labor is relatively low and the cost of equipment is relatively high.

Prerequisites

Permission of Instructor.

Field Trip

Statement

Credit Hours

LEC: 3

LAB: 0

IND: 0

RSD: 0

Total: 3

Justification for

new course:

This course is an experiential learning course.

Semester(s)

previously taught

Offered previously (twice) as GE 6000.

Co-Listed

Courses:

CIV ENG 6001 - Special Topics

Course Reviewer

Comments

Course Change Request

New Experimental Course Proposal

Date Submitted: 08/28/18 11:42 pm

Viewing: **GEOLOGY 5001.002 : Introduction to Geoscience Research Methodologies**

File: 4558

Last edit: 09/26/18 9:06 am

Changes proposed by: liukh

Requested Spring 2019

Effective Change

Date

Department Geosciences and Geological and Petroleum Engineering

Discipline Geology (GEOLOGY)

Course Number 5001

Topic ID 002

Experimental Title

Introduction to Geoscience Research Methodologies

Experimental Intro Geosci Res Method

Abbreviated

Course Title

Instructors Andreas Eckert, John Hogan, Marek Locmelis

Experimental

Catalog

Description

In Workflow

1. **RGEOSENG Chair**

2. **CCC Secretary**

3. **Sciences DSCC Chair**

4. **Pending CCC Agenda post**

5. **CCC Meeting Agenda**

6. **Campus Curricula Committee Chair**

7. **CAT entry**

8. **Registrar**

Approval Path

1. 08/29/18 7:59 am

David Borrok

(borrokd):

Approved for

RGEOSENG Chair

2. 08/29/18 12:28

pm

Brittany Parnell

(ershenb):

Approved for CCC

Secretary

3. 09/21/18 12:51

pm

Katie Shannon

(shannonk):

Approved for
Sciences DSCC
Chair

4. 10/08/18 3:36 pm

Brittany Parnell
(ershenb):

Approved for
Pending CCC
Agenda post

Students will receive hands-on training in fundamental aspects of geoscience research, ranging from (i) thorough literature review techniques to (ii) the use of sophisticated geoscience instrumentation, (iii) specialized software, (iv) database management, geoscience-specific proposal/manuscript preparation, and (vi) presentation of results at conferences.

Prerequisites

Instructor approval

Field Trip

Statement

Credit Hours

LEC: 3

LAB: 0

IND: 0

RSD: 0

Total: 3

Justification for

new course:

Students need hands-on training and experience using sophisticated geoscience instrumentation and software, large data sets and publication databases, and numerical modeling tools. They also need experience in researching papers and presenting results to larger groups of peers.

Semester(s)

previously taught

This is a new course. This course is necessary to meet obligations of NSF grant 1801598

Co-Listed

Courses:

Course Reviewer Comments

Key: 4558

[Preview Bridge](#)

Course Change Request

New Experimental Course Proposal

Date Submitted: 10/09/18 10:39 am

Viewing: **GEOLOGY 6001.002 : Applied Petroleum System Analysis**

File: 4576

Last edit: 10/16/18 1:25 pm

Changes proposed by: johfb

Requested	Spring 2019
Effective Change Date	
Department	Geosciences and Geological and Petroleum Engineering
Discipline	Geology (GEOLOGY)
Course Number	6001
Topic ID	002
Experimental Title	Applied Petroleum System Analysis
Experimental Abbreviated Course Title	Applied Petro Sys Anlys
Instructors	Jonathan Obrist-Farner

Experimental Catalog Description

In Workflow

1. **RGEOSENG Chair**
2. **CCC Secretary**
3. **Sciences DSCC Chair**
4. **Pending CCC Agenda post**
5. **CCC Meeting Agenda**
6. **Campus Curricula Committee Chair**
7. **CAT entry**
8. **Registrar**

Approval Path

1. 10/09/18 10:41 am
David Borrok (borrokd):
Approved for RGEOSENG Chair
2. 10/09/18 2:02 pm
Brittany Parnell (ershenb):
Approved for CCC Secretary
3. 10/16/18 11:45 am
Katie Shannon (shannonk):

Approved for
Sciences DSCC
Chair

4. 10/16/18 12:02
pm

Brittany Parnell
(ershenb):
Approved for
Pending CCC
Agenda post

Prospective basin evaluation for geoscience graduate students. An industry dataset will be analyzed using geological, geophysical, and engineering methods and software. Students will analyze and interpret well logs, interpret 3D seismic datasets, integrate knowledge from literature, and construct a 3D geomodel for volumetric estimations.

Prerequisites

Geo 5513, Geophys 4231, Pet Eng 3330; consent of instructor.

Field Trip

Statement

Credit Hours

LEC: 3

LAB: 3

IND: 0

RSD: 0

Total: 6

Justification for

new course:

This course is imperative to prepare geoscience graduate students for the integrative and interdisciplinary workforce requirements in the oil industry. Part of the course will be to prepare the students for the AAPG Imperial Barrel Award World Competition, which will provide an opportunity for students to present their work in front of a panel of industry experts. This course will promote the university and its teaching excellence in petroleum geoscience.

Semester(s)

previously taught

Co-Listed

Courses:

Course Reviewer

Comments

Key: 4576

[Preview Bridge](#)

Course Change Request

New Experimental Course Proposal

Date Submitted: 09/26/18 2:01 pm

Viewing: **GEOLOGY 6001.003 : Fossils, Deep Time and Extinctions**

File: 4575

Last edit: 10/16/18 1:29 pm

Changes proposed by: ikuenobe

Requested	Spring 2019
Effective Change Date	
Department	Geosciences and Geological and Petroleum Engineering
Discipline	Geology (GEOLOGY)
Course Number	6001
Topic ID	003
Experimental Title	Fossils, Deep Time and Extinctions
Experimental Abbreviated Course Title	Fossils and Extinctions
Instructors	Francisca Oboh-Ikuenobe

Experimental Catalog Description	Evolutionary development and stratigraphic distribution of macrofossil and microfossil groups, interpretation of geological (deep) time, and discussion of driving forces for major extinction events. Module includes practical exercises. Emphasis on communication skills and team work. Major focus on industrial applications.				
Prerequisites	Consent of Instructor				
Field Trip Statement	Optional field trip				
Credit Hours	LEC: 3	LAB: 0	IND: 0	RSD: 0	Total: 3

Justification for new course: Understanding how macrofossils and microfossils evolved through geological (deep) time is critical for dating and correlation in exploration of fossil fuels. An advanced course such as the proposed course will give students the critical skills they need for employment in such industries. An additional benefit is the understanding of the drivers behind the major extinction events in the geologic past and how they enable more precise biostratigraphic dating. This course will be marketed to Earth Science teachers (for MST course credit) and industry personnel, and will be taught in distance learning and classroom formats.

Semester(s) previously taught: N/A

Co-Listed Courses:

Course Reviewer Comments

In Workflow

1. **RGEOSENG Chair**
2. **CCC Secretary**
3. **Sciences DSCC Chair**
4. **Pending CCC Agenda post**
5. **CCC Meeting Agenda**
6. Campus Curricula Committee Chair
7. CAT entry
8. Registrar

Approval Path

1. 10/01/18 8:06 am
David Borrok (borrokd):
Approved for RGEOSENG Chair
2. 10/01/18 9:29 am
Brittany Parnell (ershenb):
Approved for CCC Secretary
3. 10/16/18 11:57 am
Katie Shannon (shannonk):
Approved for Sciences DSCC Chair
4. 10/16/18 12:02 pm
Brittany Parnell (ershenb):
Approved for Pending CCC Agenda post

[Preview Bridge](#)