



Campus Curricula Committee Meeting Agenda

February 8, 2017

3:00-4:30 p.m., 216 Parker Hall

(For Faculty Senate Meeting of February 23, 2017)

Review of submitted Course Change forms:

File#: 544.1	BIO SCI 6523: Advanced Biomolecules
File#: 193.1	CHEM 4810: Chemistry And Inherent Properties of Polymers
File#: 611.4	CHEM 4819: Polymer Science Laboratory
File#: 2096.1	CHEM 4850: Fundamentals Of Protective Coating I
File#: 1018.1	CHEM 5810: Introduction to Polymeric Materials
File#: 577.1	CHEM 5819: Polymer Synthesis and Characterization Lab
File#: 823.1	CHEM 5850: Introduction to Coating Chemistry
File#: 1335.1	CHEM 6820: Polymer Synthesis
File#: 1661.1	CHEM 6840: Polymer Physical Chemistry And Analysis
File#: 4279	CHEM ENG 3111: Numerical Computing and Chemical and Biochemical Engineering
File#: 4382	EXP ENG 5922: Advanced Tunneling & Underground Construction Techniques
File#: 1030.1	GEOLOGY 3511: Introduction to Mineral Deposits
File#: 4321.5	MET ENG 2410: Applied Metal Forming
File#: 4384	STAT 6432: Categorical Data Analysis

Review of submitted Experimental Course forms:

File#: 4390	BIO SCI 4001.001: Biomolecules
File# 4381	ELEC ENG 6001.002: Advanced Signal and Power Integrity
File# 4383	MATH 6001.001: Topics in Differential Equations
File# 4371	NUC ENG 5001.001 Advanced Nuclear Engineering Mathematical Methods

Review of Tabled Items:

File#: 233.3	PHIL-BS_Philosophy BS
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Course Inventory Change Request

Date Submitted: 12/22/16 8:30 am

Viewing: **BIO SCI 6523 : Advanced Biomolecules**

File: 544.1

Last edit: 12/22/16 8:30 am

Changes proposed by: niyogid

Requested Fall 2014

Effective Change

Date

Department Biological Sciences

Discipline Biological Sciences (BIO SCI)

Course Number 6523

Title

Advanced Biomolecules

Abbreviated **Advanced** Biomolecules

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. Ishelton

11. Peoplesoft

Approval Path

1. 12/22/16 8:52 am
David

Westenberg
(djwesten):

Approved for
RBIOLSCI Chair

2. 12/23/16 9:14 am
Kristy Giacomelli
(kristyg):

Approved for CCC
Secretary
3. 01/10/17 1:53 pm
Ilene Morgan
(imorgan):
Approved for
Sciences DSCC
Chair

Demonstration of the principles of modern biochemistry as they relate to the structure and function of the major macromolecules of the cell. An emphasis will be placed on reading and interpreting scientific literature and scientific writing.

Prerequisites

Bio Sci 2213 and/or Chem 4610 or an equivalent course.

Field Trip

Statement

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

Required for	No
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Majors

Elective for	No
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Majors

Justification for
change:

The BioSci department is adding an undergraduate offering called Biomolecules. For consistency, grad classes are called "Advanced" topic in our department, so we just need to change the course name to Advanced Biomolecules.

Semesters

previously

offered as an

experimental

course

Co-Listed

Courses:

Course Reviewer

Comments

Key: 544

[Preview Bridge](#)

Course Inventory Change Request

Date Submitted: 12/13/16 4:36 pm

Viewing: **CHEM 4810 : Chemistry And Inherent Properties Of Polymers**

File: 193.1

Last edit: 12/13/16 4:36 pm

Changes proposed by: tschuman

Programs

referencing this course

[CHEM-BA: Chemistry BA](#)

[CHEM-BS: Chemistry BS](#)

Other Courses

referencing this course

In The Prerequisites:

[CHEM 4819 : Polymer Science Laboratory](#)

[CHEM 5819 : Polymer Synthesis and Characterization Lab](#)

[CHEM 6820 : Polymer Synthesis](#)

Requested	Fall 2017 2014
Effective Change Date	
Department	Chemistry
Discipline	Chemistry (CHEM)
Course Number	4810
Title	

In Workflow

1. **RCHEMIST 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. Ishelton

11. Peoplesoft

Approval Path

1. 12/13/16 6:58 pm
woelk (woelkk):

Approved for
RCHEMIST Chair

2. 12/16/16 11:19
am

Kristy Giacomelli
(kristyg):

Approved for CCC
Secretary

Chemistry And Inherent Properties Of Polymers

Abbreviated Course Title Chem&Inherent Prop-Polym

3. 01/10/17 1:54 pm
Ilene Morgan
(imorgan):
Approved for
Sciences DSCC
Chair

Catalog Description

A basic study of the organic chemistry of natural and synthetic high polymers, their inherent properties and their uses in plastic, fiber, rubber, resin, food, paper and soap industries.

Prerequisites

Chem 1320 or Met Eng 1210. ~~Chem-2220.~~

Field Trip Statement

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

Total: 3

Required for Majors **Yes** ~~No~~

Elective for Majors No

Justification for change:

Co-listing the polymer courses with Materials Science and Engineering, changing co-list and prereq

Semesters previously offered as an experimental course

Co-Listed Courses:

MS&E 4810 - Course Not Found

Course Reviewer

Comments

woelkk (12/13/16 9:35 am): Rollback: It appears that the co-listed course MS&E 4810 does not exist

Key: 193

[Preview Bridge](#)

Course Inventory Change Request

Date Submitted: 12/13/16 4:37 pm

Viewing: **CHEM 4819 : Polymer Science Laboratory**

File: 611.4

Last approved: 04/25/14 3:05 pm

Last edit: 12/13/16 4:37 pm

Changes proposed by: tschuman

Programs
referencing this
course

[CHEM-BA: Chemistry BA](#)

[CHEM-BS: Chemistry BS](#)

Requested Fall **2017** ~~2014~~

Effective Change
Date

Department Chemistry

Discipline Chemistry (CHEM)

Course Number 4819

Title
Polymer Science Laboratory

Abbreviated Polymer Science Lab
Course Title

Catalog
Description

In Workflow

1. **RCHEMIST 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. Ishelton

11. Peoplesoft

Approval Path

1. 12/13/16 6:59 pm
woelk (woelkk):
Approved for
RCHEMIST Chair

2. 12/16/16 11:19
am

Kristy Giacomelli
(kristyg):
Approved for CCC
Secretary

3. 01/10/17 1:54 pm
 Ilene Morgan
 (imorgan):
 Approved for
 Sciences DSCC
 Chair

History

1. Apr 25, 2014 by
 lahne (611.1)

Lectures and laboratory experiments dealing with polymerization reactions, solution properties and bulk or solid properties will be presented. Each student will prepare polymers and carry out all characterization experiments on actual samples.

Prerequisites

Chem 4810 ~~and preceded~~ or **MS&E 4810 and preceded or** accompanied by Chem 1100.

Field Trip Statement

Credit Hours	LEC: 1	LAB: 2	IND: 0	RSD: 0
Total: 3				

Required for Majors	No
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Elective for Majors	Yes
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Justification for change:

Adding co-listing to MS&E and co-list course in prereq.

Semesters
previously
offered as an

experimental
course

Co-Listed

Courses:

MS&E 4819 - Course Not Found

Course Reviewer

Comments

woelkk (12/13/16 9:43 am): Rollback: Prerequisites should list MS&E 4810 as
alternative to CHEM 4810

Key: 611

[Preview Bridge](#)

Course Inventory Change Request

Date Submitted: 12/12/16 11:54 am

Viewing: **CHEM 4850 : Fundamentals Of Protective Coating I**

File: 2096.1

Last edit: 12/13/16 9:40 am

Changes proposed by: tschuman

Programs
referencing this
course

[CHEM-BA: Chemistry BA](#)

[CHEM-BS: Chemistry BS](#)

Requested	Fall 2017 2014
Effective Change Date	
Department	Chemistry
Discipline	Chemistry (CHEM)
Course Number	4850
Title	Fundamentals Of Protective Coating I
Abbreviated Course Title	Fund/Protective Coat I

Catalog
Description

In Workflow

1. **RCHEMIST 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. Ishelton

11. Peoplesoft

Approval Path

1. 12/13/16 6:59 pm
woelk (woelkk):

Approved for
RCHEMIST Chair

2. 12/16/16 11:19
am

Kristy Giacomelli
(kristyg):

Approved for CCC
Secretary

3. 01/10/17 1:54 pm
 Ilene Morgan
 (imorgan):
 Approved for
 Sciences DSCC
 Chair

Study of the basic principles of protective coatings with particular reference to the paint and varnish industry. Classifications, manufacture, properties and uses of protective coatings.

Prerequisites

Chem **1320**. ~~2220-~~

Field Trip

Statement

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

Required for	No
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Majors

Elective for	No
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Majors

Justification for
change:

Adding co-listing with change of prereq.

Semesters

previously

offered as an

experimental

course

Co-Listed

Courses:

MS&E 4850 - Course Not Found

Course Reviewer Comments

Key: 2096

[Preview Bridge](#)

Course Inventory Change Request

Date Submitted: 12/12/16 11:55 am

Viewing: **CHEM 5810 : Introduction to Polymeric Materials**

File: 1018.1

Last edit: 12/13/16 9:40 am

Changes proposed by: tschuman

Requested	Fall 2017 2014
Effective Change Date	
Department	Chemistry
Discipline	Chemistry (CHEM)
Course Number	5810
Title	Introduction to Polymeric Materials
Abbreviated Course Title	Intro to Polymeric Materials

Catalog Description

In Workflow

1. **RCHEMIST 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. Ishelton
11. Peoplesoft

Approval Path

1. 12/13/16 7:00 pm
woelk (woelkk):
Approved for
RCHEMIST Chair
2. 12/16/16 11:19 am
Kristy Giacomelli
(kristyg):
Approved for CCC
Secretary

3. 01/10/17 1:54 pm
 Ilene Morgan
 (imorgan):
 Approved for
 Sciences DSCC
 Chair

A basic study of the organic chemistry of natural and synthetic high polymers, their inherent properties and their uses in plastic, fiber, rubber, resin, food, paper and soap industries. Credit may not be given for both Chem 5810 and Chem 4810.

Prerequisites

Chem 1320 or Met Eng 1210. ~~Chem 2220.~~

Field Trip

Statement

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

Required for	No
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Majors

Elective for	No
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Majors

Justification for
change:

Adding of a co-listing with change in prereq.

Semesters

previously

offered as an

experimental

course

Co-Listed

Courses:

MS&E 5810 - Course Not Found

Course Reviewer Comments

Key: 1018

[Preview Bridge](#)

Course Inventory Change Request

Date Submitted: 12/13/16 4:39 pm

Viewing: **CHEM 5819 : Polymer Synthesis and Characterization Lab**

File: 577.1

Last edit: 12/13/16 7:03 pm

Changes proposed by: tschuman

Requested	Fall 2017 2014
Effective Change Date	
Department	Chemistry
Discipline	Chemistry (CHEM)
Course Number	5819
Title	Polymer Synthesis and Characterization Lab
Abbreviated Course Title	Polymer Synth & Charact Lab

Catalog Description

In Workflow

1. **RCHEMIST 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. Ishelton
11. Peoplesoft

Approval Path

1. 12/13/16 7:04 pm
woelk (woelkk):
Approved for
RCHEMIST Chair
2. 12/16/16 11:19 am
Kristy Giacomelli
(kristyg):
Approved for CCC
Secretary

3. 01/10/17 1:55 pm
 Ilene Morgan
 (imorgan):
 Approved for
 Sciences DSCC
 Chair

Laboratory experiments dealing with polymerization syntheses and solution, bulk and solid properties will be presented. Each student will prepare polymers and carry out all characterization experiments on actual samples. Credit may not be given for both Chem 5819 and Chem 4819.

Prerequisites

Chem 4810 or **MS&E 4810 or Chem 5810 or MS&E 5810** or Chem ~~5810 or Chem-Eng 5310, 375,~~ preceded ~~or or~~ accompanied by Chem 1100 **or Chem 5100** or ~~or~~ an equivalent training program approved by S&T.

Field Trip

Statement

Credit Hours	LEC: 1	LAB: 2	IND: 0	RSD: 0
Total: 3				

Required for Majors	No
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Elective for Majors	No
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Justification for change:

Old three digit course number prereq from Chemical engineering updated to correct number. Adding new co-listing and co-listed prereq courses.

Semesters previously offered as an experimental course

Co-Listed

Courses:

MS&E 5819 - Course Not Found

Course Reviewer

Comments

woelkk (12/13/16 9:45 am): Rollback: Prerequisites should also list the equivalent

MS&E courses

Key: 577

[Preview Bridge](#)

Course Inventory Change Request

Date Submitted: 12/12/16 12:08 pm

Viewing: **CHEM 5850 : Introduction to Coating Chemistry**

File: 823.1

Last edit: 12/13/16 9:45 am

Changes proposed by: tschuman

Requested	Fall 2017 2014
Effective Change Date	
Department	Chemistry
Discipline	Chemistry (CHEM)
Course Number	5850
Title	Introduction to Coating Chemistry
Abbreviated Course Title	Intro to Coating Chemistry

Catalog Description

In Workflow

1. **RCHEMIST 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. Ishelton
11. Peoplesoft

Approval Path

1. 12/13/16 7:04 pm
woelk (woelkk):
Approved for
RCHEMIST Chair
2. 12/16/16 11:19 am
Kristy Giacomelli
(kristyg):
Approved for CCC
Secretary

3. 01/10/17 1:55 pm
 Ilene Morgan
 (imorgan):
 Approved for
 Sciences DSCC
 Chair

Study of the basic principles of protective coatings with particular reference to the paint and varnish industry. Classifications, manufacture, properties and uses of protective coatings. Credit may not be given for both Chem 5850 and Chem 4850.

Prerequisites

Chem **1320** ~~2220~~ or **Met Eng 1210**. ~~Chem 5210~~.

Field Trip

Statement

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

Required for	No
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Majors

Elective for	No
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Majors

Justification for
change:

Addition of new co-list and change in prereq.

Semesters

previously

offered as an

experimental

course

Co-Listed

Courses:

MS&E 5850 - Course Not Found

Course Reviewer Comments

Key: 823

[Preview Bridge](#)

Course Inventory Change Request

Date Submitted: 12/13/16 4:41 pm

Viewing: **CHEM 6820 : Polymer Synthesis**

File: 1335.1

Last edit: 12/13/16 7:07 pm

Changes proposed by: tschuman

Requested	Fall 2017 2014
Effective Change Date	
Department	Chemistry
Discipline	Chemistry (CHEM)
Course Number	6820
Title	Polymer Synthesis
Abbreviated Course Title	Polymer Synthesis

Catalog Description

In Workflow

1. **RCHEMIST 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. Ishelton
11. Peoplesoft

Approval Path

1. 12/13/16 7:07 pm
woelk (woelkk):
Approved for
RCHEMIST Chair
2. 12/16/16 11:19 am
Kristy Giacomelli
(kristyg):
Approved for CCC
Secretary

3. 01/10/17 1:55 pm
 Ilene Morgan
 (imorgan):
 Approved for
 Sciences DSCC
 Chair

The methods of organic monomer and polymer syntheses will be explored. Mechanistic and structural components, modern and current industrial methods for polymer syntheses will be discussed. Topics include linear, branched, graft, and dendritic polymers, nano-technology and macromers.

Prerequisites

Chem **4810** ~~4810~~; ~~Chem 4210~~ or **MS&E 4810 or Chem 5810 or MS&E 5810**; Chem **2220 or Chem 4210 or Chem 4220 or Chem 5210 or Chem 5220.** ~~4220-~~

Field Trip

Statement

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

Required for	No
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Majors

Elective for	No
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Majors

Justification for
change:

New co-listing and change in pre-req; adding co-list courses in pre-req.

Semesters

previously

offered as an

experimental

course

Co-Listed

Courses:

MS&E 6820 - Course Not Found

Course Reviewer

Comments

woelkk (12/13/16 9:47 am): Rollback: Is it Met Eng courses in the prerequisites or should it be MS&E? or both?

Key: 1335

[Preview Bridge](#)

Course Inventory Change Request

Date Submitted: 12/13/16 4:42 pm

Viewing: **CHEM 6840 : Polymer Physical Chemistry And Analysis**

File: 1666.1

Last edit: 12/13/16 7:08 pm

Changes proposed by: tschuman

Requested	Fall 2017 2014
Effective Change Date	
Department	Chemistry
Discipline	Chemistry (CHEM)
Course Number	6840
Title	Polymer Physical Chemistry And Analysis
Abbreviated Course Title	Polymr Phys Chem & Analy

Catalog Description

In Workflow

1. **RCHEMIST 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. Ishelton
11. Peoplesoft

Approval Path

1. 12/13/16 7:09 pm
woelk (woelkk):
Approved for
RCHEMIST Chair
2. 12/16/16 11:19 am
Kristy Giacomelli
(kristyg):
Approved for CCC
Secretary

3. 01/10/17 1:56 pm
 Ilene Morgan
 (imorgan):
 Approved for
 Sciences DSCC
 Chair

A study of the physical properties of macromolecular systems including polymer solutions, gels, bulk polymers and rubbers. The chemical characterization of polymers based on their thermal, spectroscopic, microstructure and molecular weight is also discussed.

Prerequisites

Chem 4810 or MS&E 4810 or Chem 5810 or MS&E 5810; thermodynamics. ~~Chem 2220 and Chem 3430.~~

Field Trip

Statement

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

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

Majors

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

Majors

Justification for
change:

Addition of new co-listing and change in pre-req.

Semesters

previously

offered as an

experimental

course

Co-Listed

Courses:

MS&E 6840 - Course Not Found

Course Reviewer

Comments

woelkk (12/13/16 9:52 am): Rollback: This is a graduate level course. Is listing 3000-level prerequisites appropriate? Undergraduates taking this course need special permission of the instructor anyway. Please advise.

Key: 1666

[Preview Bridge](#)

Course Inventory Change Request

Date Submitted: 01/24/17 2:12 pm

Viewing: **CHEM ENG 3111 : Numerical Computing in Chemical and Biochemical Engineering**

File: 4279.14

Last approved: 01/24/17 2:09 pm

Last edit: 01/24/17 2:12 pm

Changes proposed by: kristyg

Programs

referencing this course

[CH ENG-BS: Chemical Engineering BS](#)

Other Courses

referencing this course

In The Prerequisites:

[CHEM ENG 3150 : Chemical Engineering Reactor Design](#)

Requested	Fall 2016
Effective Change Date	
Department	Chemical and Biochemical Engineering
Discipline	Chemical Engineering (CHEM ENG)
Course Number	3111
Title	Numerical Computing in Chemical and Biochemical Engineering

In Workflow

1. **RCHEMENG 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. Ishelton
11. Peoplesoft

Approval Path

1. 01/24/17 2:12 pm
Kristy Giacomelli (kristyg):
Approved for
RCHEMENG Chair
2. 01/24/17 2:12 pm
Kristy Giacomelli (kristyg):
Approved for CCC
Secretary

Abbreviated Course Title Numerical Computing

Catalog Description

3. 01/24/17 2:13 pm

Kristy Giacomelli

(kristyg):

Approved for

Engineering DSCC

Chair

4. 01/24/17 2:13 pm

Kristy Giacomelli

(kristyg):

Approved for

Pending CCC

Agenda post

History

1. Jan 24, 2017 by

Daniel Forciniti

(forcinit)

The students are introduced to the concepts of engineering problem formulation, model building, and multi scale models. Matlab, spreadsheet and polymath computing are used to solve chemical engineering problems involving systems of linear and non linear algebraic equations, and ordinary and partial differential equations.

Prerequisites

Math 3304 and **either** both Comp Sci 1971 and Comp Sci **1981 or Comp Sci 1972 and Comp Sci 1982. ~~1981.~~** Admitted to the Chemical Engineering Program.

Field Trip

Statement

Credit Hours

LEC: 2

LAB: 1

IND: 0

RSD: 0

Total: 3

Required for

Yes

Majors

Elective for
Majors

No

Justification for
change:

Putting through the current change. The changes are now on a CC form that was not pushed through correctly in Fall 2016.

Semesters
previously
offered as an
experimental
course

Co-Listed
Courses:

Course Reviewer
Comments

Course Inventory Change Request

New Course Proposal

Date Submitted: 12/05/16 11:05 am

Viewing: **EXP ENG 5922 : Advanced Tunneling & Underground Construction Techniques**

File: 4382

Last edit: 01/18/17 12:02 pm

Changes proposed by: kapqh4

Requested	Fall 2017
Effective Change Date	
Department	Mining & Nuclear Engineering
Discipline	Explosives Engineering (EXP ENG)
Course Number	5922
Title	Advanced Tunneling & Underground Construction Techniques
Abbreviated Course Title	Adv Tun&Undergrnd Const

Catalog Description

In Workflow

1. **RMINNUCL 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. Ishelton
11. Peoplesoft

Approval Path

1. 12/05/16 1:13 pm
Braden lusk (blusk): Approved for RMINNUCL Chair
2. 12/16/16 11:19 am
Kristy Giacomelli (kristyg):

Approved for CCC
Secretary
3. 01/18/17 12:02
pm
craper: Approved
for Engineering
DSCC Chair

Advanced topics in mechanical and conventional excavation techniques in underground tunneling and construction. Topics include tunneling layouts design, equipment and performance modeling, ground control systems including support, drainage, and structural integrity. Construction specifications, advance rate and contractual and cost estimation.

Prerequisites

Consent of Instructor

Field Trip

Statement

Credit Hours	LEC: 2	LAB: 1	IND: 0	RSD: 0
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Total: 3

Required for	No
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Majors

Elective for	Yes
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Majors

Justification for

new course:

This new course is requested so it can be co-listed with Min Eng 5922. Exp Eng 5922 can then be used for students seeking certificates, minors, masters, or PhDs in Explosives Engineering.

Semesters

previously

offered as an

experimental
course

Co-Listed

Courses:

MIN ENG 5922 - Advanced Tunneling & Underground Construction Techniques

Course Reviewer

Comments

sraper (01/18/17 12:02 pm): changed to elective for majors

Key: 4382

[Preview Bridge](#)

Course Inventory Change Request

Date Submitted: 12/02/16 4:31 pm

Viewing: **GEOLOGY 3511 : Introduction to
~~Metallic And Industrial~~ Mineral Deposits**

File: 1030.1

Last edit: 01/10/17 1:51 pm

Changes proposed by: liukh

Programs
referencing this
course

[GL&GPH-BS: Geology and Geophysics BS](#)

Other Courses
referencing this
course

In The Prerequisites:

[GEOLOGY 6551 : Ore Deposition](#)

[MIN ENG 6522 : Mining Property Feasibility Studies And
Evaluation Procedure](#)

Requested	Fall 2017 2014
Effective Change Date	
Department	Geosciences and Geological and Petroleum Engineering
Discipline	Geology (GEOLOGY)
Course Number	3511
Title	

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. Ishelton

11. Peoplesoft

Approval Path

1. 12/02/16 4:39 pm

Francisca Oboh-
Ikuenobe
(ikuenobe):

Approved for
RGEOSENG Chair

2. 12/16/16 11:19
am

Kristy Giacomelli
(kristyg):

Introduction to ~~Metallic And Industrial~~ Mineral Deposits

Abbreviated **Intro Mineral Depos ~~Metal &~~**
 Course Title **~~Indus Minr Depos~~**

Approved for CCC
 Secretary
 3. 01/10/17 1:52 pm
 Ilene Morgan
 (imorgan):
 Approved for
 Sciences DSCC
 Chair

Catalog
 Description

Basic processes involved in the formation of metallic and industrial mineral deposits illustrated by typical examples of deposits from throughout the world. Exploration and economic factors in mineral exploration and development are reviewed. ~~Two all day field trips at student expense required.~~

Prerequisites

Geology 1110 and 2610.

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:

Improve the name so that more students can take it.

Semesters
 previously
 offered as an
 experimental
 course

Co-Listed

Courses:

Course Reviewer

Comments

imorgan (01/10/17 1:51 pm): Changed abbreviated title with departmental approval.

Key: 1030

[Preview Bridge](#)

Course Inventory Change Request

Date Submitted: 12/22/16 10:48 am

Viewing: **MET ENG 2410** ~~3410~~: **Applied Metal Forming**

File: 4321.5

Last approved: 10/21/16 3:06 pm

Last edit: 12/22/16 10:48 am

Changes proposed by: smiller

Requested **Fall** ~~Spring~~ 2017

Effective Change

Date

Department Materials Science & Engineering

Discipline Metallurgical Engineering (MET ENG)

Course Number **2410** ~~3410~~

Title

Applied Metal Forming

Abbreviated Applied Metal Forming

Course Title

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. FS Meeting Agenda
8. Faculty Senate Chair
9. Registrar
10. Ishelton
11. Peoplesoft

Approval Path

1. 12/22/16 12:26 pm
mjokeefe:
Approved for
RMATSENG Chair
2. 12/23/16 9:14 am
Kristy Giacomelli
(kristyg):
Approved for CCC
Secretary

3. 01/18/17 12:04
pm
sraper: Approved
for Engineering
DSCC Chair

History

1. Oct 21, 2016 by
smiller

Introduction to the art and science of blacksmithing. Students to use forges to heat steel for shaping it. Techniques for shaping, cutting, chiseling, twisting, etc. Knowledge of hand and power tools and their use. Safety in the shop will be emphasized. History of blacksmithing will also be covered. Includes a lab portion which will work on projects.

Prerequisites

Chem 1100.

Field Trip

Statement

Credit Hours	LEC: 1	LAB: 1	IND: 0	RSD: 0
Total: 2				

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

Elective for Majors	Yes
------------------------	-----

Justification for change:

Course number change to more accurately reflect the level of the material presented in the course.

Semesters previously

offered as an
experimental
course

FS15, Sp16, scheduled for FS16

Co-Listed

Courses:

Course Reviewer

Comments

Key: 4321

[Preview Bridge](#)

Course Inventory Change Request

New Course Proposal

Date Submitted: 12/12/16 10:50 am

Viewing: **STAT 6342 : Categorical Data Analysis**

File: 4384

Last edit: 12/12/16 10:50 am

Changes proposed by: imorgan

Requested	Fall 2017
Effective Change Date	
Department	Mathematics & Statistics
Discipline	Statistics (STAT)
Course Number	6342
Title	Categorical Data Analysis
Abbreviated Course Title	Categorical Data Analy

Catalog
Description

In Workflow

1. **RMATHEMA 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. Ishelton
11. Peoplesoft

Approval Path

1. 12/12/16 10:53 am
sclark: Approved for RMATHEMA Chair
2. 12/16/16 11:20 am
Kristy Giacomelli (kristyg):

Approved for CCC
Secretary
3. 01/10/17 1:56 pm
Ilene Morgan
(imorgan):
Approved for
Sciences DSCC
Chair

A graduate-level introduction to statistical methods for analyzing categorical data. The topics include: contingency tables, generalized linear models including logistic regression models, log-linear models, ordinal and nominal regression models, Poisson regression, etc. The course will involve practical applications of the ideas and their implementations.

Prerequisites

Stat 5644 and one of Stat 5346, Stat 5353, Stat 6344, or Stat 6553.

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 new course:

The topic is of current interest and the course has run twice successfully as an experimental course.

Semesters previously offered as an

experimental

course

Spring 2012 (9 students), Fall 2014 (5 students).

Co-Listed

Courses:

Course Reviewer

Comments

Key: 4384

[Preview Bridge](#)

Course Inventory Change Request

New Experimental Course Proposal

Date Submitted: 12/22/16 8:33 am

Viewing: **BIO SCI 4001.002 : Biomolecules**

File: 4390

Last edit: 01/24/17 10:30 am

Changes proposed by: niyogid

Requested Fall 2017

Effective Change

Date

Department Biological Sciences

Discipline Biological Sciences (BIO SCI)

Course Number 4001

Topic ID 002

Experimental

Title

Biomolecules

Experimental Biomolecules

Abbreviated

Course Title

Instructors Ning Sui

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. Registrar

Approval Path

1. 12/22/16 8:51 am

David

Westenberg

(djwesten):

Approved for

RBIOLSCI Chair

2. 12/23/16 9:14 am

Kristy Giacomelli

(kristyg):

Approved for CCC

Secretary

3. 01/10/17 1:53 pm

Ilene Morgan

(imorgan):

Approved for

Detailed analysis of the structures, properties, and functions of the four major macromolecules: proteins, nucleic acids, carbohydrates, and lipids. Emphasis on the fundamentals of the building blocks of life and their implications.

Prerequisites

BIO SCI 2213 or CHEM 2210.

Field Trip

Statement

Credit Hours

LEC: 3

LAB: 0

IND: 0

RSD: 0

Total: 3

Justification for

new course:

This class meets a need for an advanced molecular biology class that many of our undergraduates need for medical and graduate schools.

Semester(s)

previously taught

None

Co-Listed

Courses:

Course Reviewer

Comments

imorgan (01/10/17 1:53 pm): Inserted period at end of prerequisite.

Course Inventory Change Request

New Experimental Course Proposal

Date Submitted: 12/05/16 10:12 am

Viewing: **ELEC ENG 6001.002 : Advanced Signal and Power Integrity**

File: 4381

Last edit: 01/24/17 11:10 am

Changes proposed by: martins

Requested Fall 2017

Effective Change

Date

Department Electrical and Computer Engineering

Discipline Electrical Engineering (ELEC ENG)

Course Number 6001

Topic ID 002

Experimental

Title

Advanced Signal and Power Integrity

Experimental Adv Signal & Power Enteg

Abbreviated

Course Title

Instructors Dr. Jun Fan

Experimental

Catalog

Description

In Workflow

1. RELECENG Chair
2. CCC Secretary
3. Engineering DSCC Chair
4. Pending CCC Agenda post
5. CCC Meeting Agenda
6. Campus Curricula Committee Chair
7. Registrar

Approval Path

1. 12/06/16 9:33 am
Daryl Beetner (daryl): Approved for RELECENG Chair
2. 12/16/16 11:19 am
Kristy Giacomelli (kristyg): Approved for CCC Secretary
3. 01/18/17 12:05 pm
sraper: Approved for Engineering DSCC Chair

This course covers a few advanced topics on signal/power integrity, including high-frequency measurement & calibration, 3D & advanced packaging for SiP applications, through-silicon- via (TSV) & silicon interposer, power supply induced jitter, equalization & PAM for 56Gb/s channel & beyond, physics-based modeling. Real-world examples will be used.

Prerequisites

Elec Eng 5620 or Comp Eng 5620

Field Trip

Statement

N/A

Credit Hours

LEC: 3

LAB: 0

IND: 0

RSD: 0

Total: 3

Justification for

new course:

Modern electronic systems and devices are operating at increasingly high speed. Many of the design issues for signal and power integrity are not covered in any existing courses, creating a gap for students interested in high-speed hardware design. Further, the preceding course (Elec Eng/Comp Eng 5620) can only cover some of the fundamental concepts in the field due to limited time. This proposed course will show students the applications of the concepts in solving the real-world engineering problems, with the latest research outcomes incorporated. Students will gain hands-on experience and skills from course projects. The course is suitable for both Elec Eng and Comp Eng graduate students who are interested in hardware design of high-speed computer and networking systems.

Semester(s)

previously taught

Co-Listed

Courses:

COMP ENG 6001 - Special Topics

Course Reviewer

Comments

daryl (12/02/16 7:04 pm): Rollback: Hi Sandy. Could you modify the catalog description? The description currently ends as "and silicon interposer, power supply ind". I believe the last words were cut off. Thanks, Daryl.

srafer (01/18/17 12:04 pm): corrected prereq EE 560 to EE5620

Key: 4381

[Preview Bridge](#)

Course Inventory Change Request

New Experimental Course Proposal

Date Submitted: 12/09/16 12:16 pm

Viewing: **MATH 6001.001 : Topics in Partial Differential Equations**

File: 4383

Last edit: 01/24/17 11:14 am

Changes proposed by: imorgan

Requested Fall 2017

Effective Change

Date

Department Mathematics & Statistics

Discipline Mathematics (MATH)

Course Number 6001

Topic ID 001

Experimental

Title

Topics in Partial Differential Equations

Experimental Topics in PDE

Abbreviated

Course Title

Instructors John Singler or Xiaoming He or Yanzhi Zhang

Experimental

Catalog

Description

In Workflow

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

Approval Path

1. 12/09/16 1:16 pm
sclark: Approved for RMATHEMA Chair
2. 12/16/16 11:19 am
Kristy Giacomelli (kristyg): Approved for CCC Secretary
3. 01/10/17 1:56 pm
Ilene Morgan (imorgan): Approved for

Advanced topics in partial differential equations not covered in other courses. The content of the course will depend on the research interests of the instructor and the students. The content of the course may vary and the course may be repeated for additional credit.

Prerequisites

Math 5325 or Math 6375 or Math 5604 or Math 6602.

Field Trip

Statement

Credit Hours

LEC: 3

LAB: 0

IND: 0

RSD: 0

Total: 3

Justification for

new course:

We now have several faculty members interested in PDE's and we would like to expand our offerings with a 6000-level course which will cover PDE's but whose specific content may vary based on the instructor.

Semester(s)

previously taught

None.

Co-Listed

Courses:

Course Reviewer

Comments

Course Inventory Change Request

New Experimental Course Proposal

Date Submitted: 12/09/16 8:43 am

Viewing: **NUC ENG 5001.001 : Advanced Nuclear Engineering Mathematical Methods**

File: 4371

Last edit: 01/18/17 12:03 pm

Changes proposed by: gmueller

Requested	Fall 2017
Effective Change Date	
Department	Mining & Nuclear Engineering
Discipline	Nuclear Engineering (NUC ENG)
Course Number	5001
Topic ID	001
Experimental Title	Advanced Nuclear Engineering Mathematical Methods
Experimental Abbreviated Course Title	NE Eng Math Methods
Instructors	Gary E. Mueller

Experimental Catalog Description

In Workflow

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

Approval Path

1. 12/10/16 4:36 am
Braden lusk
(blusk): Approved for RMINNUCL Chair
2. 12/16/16 11:19 am
Kristy Giacomelli
(kristyg): Approved for CCC Secretary
3. 01/18/17 12:03 pm
sraper: Approved for Engineering DSCC Chair

Application of advanced mathematical methods used in the solution of nuclear engineering problems, particularly with the neutron point kinetics equations, the transient Navier-Stokes equations, and the non-homogeneous transient heat conduction equation with transient nuclear heat generation terms.

Prerequisites

Nuc Eng 4203.

Field Trip

Statement

None.

Credit Hours

LEC: 3

LAB: 0

IND: 0

RSD: 0

Total: 3

Justification for

new course:

This will be the graduate level course of NUC ENG 4345 Nuclear Engineering Mathematical Methods (LEC 3.0), and will have advanced application of mathematical methods used in the solution of nuclear engineering problems, particularly with the neutron point kinetics equations, the transient Navier-Stokes equations, and the non-homogeneous transient heat conduction equation with transient nuclear heat generation terms.

Semester(s)

previously taught

None.

Co-Listed

Courses:

Course Reviewer

Comments

smetg6 (11/08/16 1:42 pm): Added topic id.

sraper (12/07/16 11:57 am): Rollback: There is currently a course with the same title and description (Nuc Eng 4345). What is the intent for this course. Is the course intended to be a dual type course with advanced material, if so, title change and something to indicate advanced.

kristyg (12/09/16 8:34 am): Rollback: Changing name per CCC meeting.

sraper (01/18/17 12:03 pm): changed to FS 2017

Program Change Request

Date Submitted: 04/25/16 3:19 pm

Viewing: **PHIL-BS : Philosophy BS**

File: 233.3

Last approved: 07/21/15 12:22 pm

Last edit: 01/19/17 10:04 am

Changes proposed by: dittmerj

Catalog Pages

Using this

Program

[Philosophy](#)

Start Term Fall ~~2015~~ **2017**

Program Code PHIL-BS

Department Arts, Languages, & Philosophy

Title

Philosophy BS

Program Requirements and Description

Bachelor of Science Philosophy

A minimum of 120 credit hours is required for a bachelor of science degree in philosophy, and a grade point average of 2.0 must be obtained. These requirements for the B.S. are in addition to credit received for basic ROTC.

The B.S. in philosophy degree requires the following:

1. ~~ENGLISH 1120~~ **ENGLISH 1120** (entering students will normally take ~~ENGLISH 1120~~ **ENGLISH 1120** within their first year of study.) (3 hours)

2. Sciences. A total of 24 hours in biological, physical (chemistry, geology, and physics), and mathematical (mathematics, statistics, computer science, and information science and technology) sciences is required. A course from each of the biological and physical sciences is required. Students

In Workflow

1. **RPHILOSO 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. **kristyg**

Approval Path

1. 08/25/16 9:01 am
Audra Merfeld-Langston (audram): Approved for RPHILOSO Chair
2. 08/31/16 1:34 pm
Shauntae Ellis (smetg6): Approved for CCC Secretary
3. 08/31/16 2:00 pm
Petra Dewitt (dewittp): Approved for Arts & Humanities DSCC Chair
4. 10/05/16 10:00 am
Shauntae Ellis (smetg6): Rollback to CCC Secretary for Pending CCC Agenda post
5. 12/01/16 3:46 pm
Kristy Giacomelli (kristyg): Approved for CCC Secretary
6. 12/02/16 9:41 am
Petra Dewitt (dewittp): Approved

have to take two math or statistics courses; both must be at the level of college algebra or higher. At least one hour of lab coursework is required. Students may count up to 12 hours of engineering courses, at the discretion of the major advisor. Also, students may count up to 3 hours from the following list, but which may not be used to satisfy another requirement: History of science and technology classes ([HISTORY 2510](#), [HISTORY 3510](#), ~~HISTORY 2510~~, ~~HISTORY 3510~~, and [HISTORY 3530](#)), [PHILOS 4345](#), ~~HISTORY 2530~~, ~~PHILOS 4345~~, or [PHILOS 3254](#) ~~PHILOS 3254~~ (24 hours)

3. Social Sciences. A total of 15 hours in social sciences is required. At least one course from two of the four areas must be taken: economics, sociology/anthropology, history/political science, and psychology. Six (6) hours from the biological, physical, and mathematical science, as well as engineering, not already used for the science requirement, may be substituted for 3 hours of social sciences; this substitution is only permitted once, unless allowed at the discretion of the major advisor. (15 hours)

4. Humanities. A total of 12 hours in humanities other than philosophy is required. Courses may be taken in literature, foreign/modern languages, speech and media studies, art, music, or theater. Three (3) hours from history not used for the social science requirement, and not [HISTORY 1300](#) ~~HISTORY 1300~~ or [HISTORY 1310](#), ~~HISTORY 1310~~, may be used to fulfill this requirement. (12 hours)

5. Two (2) Communication Intensive courses are required; waiving and substitutions are at the discretion of the student's advisor.

6. Minor: A minor will be selected from any discipline other than the major with approval of the major advisor. A total of at least 15 hours is required for the minor, but may include courses which also satisfy other requirements. At least nine hours must be beyond the introductory level.

7. Basic ROTC may be elected in the freshman and sophomore years, but is not creditable toward the B.S. in philosophy degree. Six credit hours of advanced ROTC may be credited toward this degree.

8. Elective Credits: In consultation with her/his advisor, each student will elect sufficient additional courses to complete a minimum of 120 credit hours which may include [MATH 1120](#) ~~MATH 1120~~ or [MATH 1140](#) ~~MATH 1140~~ and [MATH 1160](#) ~~MATH 1160~~.

9. Philosophy: A total of at least 30 hours of philosophy courses is required. This is to include [PHILOS 1105](#), [PHILOS 1115](#), ~~PHILOS 1105~~, ~~PHILOS 1115~~, and at least 12 hours at the 4000-level, although substitutions may be permitted at the discretion of the major advisor. All philosophy work must accumulate to at least a 2.0 grade point average.

for Arts &
Humanities DSCC
Chair
7. 12/16/16 2:42 pm
Kristy Giacomelli
(kristyg): Approved
for Pending CCC
Agenda post

History

1. Apr 16, 2014 by
Lahne Black
(lahne)
2. Oct 20, 2014 by
pantaleoa
3. Jul 21, 2015 by
pantaleoa

Justification for request

See attached document for requested change, as well as for justification. (Justification: The current required course is no longer offered by our faculty; suitable and more appropriate alternative courses are offered regularly.)

Supporting Documents

Course Reviewer Comments

smetg6 (08/31/16 1:34 pm): Changed Start Term to Fall 2017 from 2015

smetg6 (10/05/16 10:00 am): Rollback: Tabled per finding attachment

imorgan (01/19/17 9:52 am): Updated History 2530 to History 3530. The department's

Justification for change of communication intensive requirement for B.S. in Philosophy

The philosophy program of the Arts, Languages, and Philosophy Department would like to replace the current course, Phil 4335 Philosophy of Religion, needed for B.S. in philosophy candidates to complete their “COMMUNICATION INTENSIVE REQUIREMENT IN THE STUDENTS MAJOR” with the following: Students must take at least one of the following courses: Phil 4340 – Social Ethics; Phil 4350 – Environmental Ethics; Phil 4360 – Foundations of Political Conflict; Phil 4399 – Special Topics.

That is, instead of having to take Phil 4335, which we no longer offer, students would be required to take at least one of the four following courses: Phil 4340; Phil 4350; Phil 4360; Phil 4399.

Phil 4340, Phil 4350, Phil 4360, and Phil 4399 each require a considerable amount of writing, discussion, and presentation. Normally, students write at least 4000 words a semester in these courses, if not considerably more.

Signed,

Joel Dittmer

Assistant Professor of Philosophy

ALP, Missouri S&T