



Campus Curricula Committee Meeting Agenda

January 14, 2014

3:30 pm, Room 117 Fulton Hall

Implementing experiential learning into undergraduate curricula

Review of submitted Degree Change forms:

- File #16.1 Chemistry – Chemistry BS
- File #17.1 Chemistry – Chemistry Minor
- File #64.1 Geological Science & Engineering – Geology and Geophysics BS
- File #115.1 Physics – Physics BS
- File #193.1 Psychological Science – Psychology BS

Review of submitted Experimental Course forms:

- File #3990 Art 201 – Topics in Visual Culture and Aesthetics
- File #4006 Chemistry 301 – Organometallics
- File #4013 Biological Sciences 301 – Experimental Research Design
- File #4014 Art 201 – Exploring Digital Art
- File #4015 Biological Sciences 201 – Cave Biology
- File #4017 Biological Sciences 301 – Biology of Aging
- File #4019 Chemistry 401 – Neurochemistry with Clinical Correlations
- File #4020 Chemistry 301 – Fundamentals of Mass Spectrometer Design and Fabrication
- File #4021 Statistics 6001 – Statistical Shape Analysis
- File #4024 Nuclear Engineering 301 – Nuclear Reactor Passive Safety
- File #4025 Information Science & Technology 6001 – Information Visualization and Analytics
- File #4026 Art 201 – Study of Documentary
- File #4028 Chemistry 401 – Molecular Reaction Dynamics

Review of Tabled Items:

- DC File #48.1 English and Technical Communication – English BA
- CC File #8475 Mining Engineering 407 – Theory of High Explosives
- CC File #8476 Economics 350 – Ethical Problems in a Global Environment
- CC File #8477 Explosives Engineering 305 – Explosives Handling and Safety



CC File #8478 Materials Science and Engineering 325 – Materials Selection in Mechanical Design
CC File #8479 Environmental Engineering 265 – Water and Wastewater Engineering
CC File #8480 Philosophy 201 – Symbolic Logic in Argumentation

Program Change Request

Date Submitted: 12/03/13 2:29 pm

Viewing: **CHEM-BS : Chemistry BS**

File: 16.1

Last edit: 12/13/13 5:08 pm

Changes proposed by: tschuman

Catalog Pages	Chemistry
Using this Program	
Start Term	Fall 2014
Program Code	CHEM-BS
Department	Chemistry
Title	Chemistry BS

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. Peoplesoft

Approval Path

1. 12/03/13 5:52 pm woelkk: Approved for RCHEMIST Chair
2. 12/05/13 9:27 am lahne: Approved for CCC Secretary
3. 12/13/13 5:09 pm tauritzd: Approved for Sciences DSCC Chair

Program Requirements and Description

Bachelor of Science
Chemistry

A minimum of 131 credit hours is required for a Bachelor of Science degree in Chemistry and an average of at least two grade points per credit hour must be obtained. These requirements for the B.S. degree are in addition to credit received for algebra, trigonometry, and basic ROTC.

The Chemistry science curriculum requires twelve semester hours in humanities, exclusive of foreign language, and must include [ENGLISH 60](#) or [ENGLISH 160](#). A minimum of nine semester hours is required in social sciences, including either [HISTORY 175](#), [HISTORY 176](#), [HISTORY 112](#), or [POL SCI 90](#). Specific requirements for the bachelor degree are outlined in the sample program listed below.

Freshman Year			
First Semester	Credits	Second Semester	Credits
CHEM 1	4	CHEM 3	3
CHEM 2	1	CHEM 8	2
CHEM 4	1	MATH 21	5
CHEM 11	1	Electives	6
MATH 8	5		
ENGLISH 20	3		
HISTORY 112 , or 175 , or 176 , or POL SCI 90	3		
	18		16
Sophomore Year			
First Semester	Credits	Second Semester	Credits
CHEM 221	4	CHEM 223	4
CHEM 226	1	CHEM 228	1
MATH 22	4	PHYSICS 25	4
PHYSICS 21	4	PHYSICS 26	1
PHYSICS 22	1	COMP SCI 53 or 74 and 78	3
Elective	3	COMP SCI 74 & COMP SCI 78	3
		STAT 213	3
	17		16
Junior Year			
First Semester	Credits	Second Semester	Credits
CHEM 343	3	CHEM 151	4
ENGLISH 60	3	CHEM 237	3
CHEM 361	3	CHEM 238	1
Electives	6	CHEM 241	3
		CHEM 242	1

		CHEM 328	3
		15	15
Senior Year			
First Semester	Credits	Second Semester	Credits
CHEM 243	3	CHEM 310 or 390	1
CHEM 244	1	Chemistry Electives	7
CHEM 251	4	Electives	9
CHEM 310 or 390	1		
Chemistry Electives	6		
Electives	2		
		17	17
Total Credits: 131			

Notes:

Grade Requirements: Students must complete a minimum of 131 credit hours for a Bachelor of Science in Chemistry degree. A minimum grade of "C" is required for each chemistry course counted towards the degree.

ROTC: Basic ROTC may be taken in the freshman and sophomore year, but is not countable towards a degree.

Chemistry Electives: Of these thirteen (13) hours of chemistry electives, three (3) must be chosen from 3xxx, 4xxx 300 (or 5xxx or higher 400-with permission) level chemistry courses, and ten (10) hours must be 2xxx 200-level or higher or higher in chemistry or in another technical area with permission of department chairperson.

Electives: There are twenty-six (26) hours of electives. Six (6) elective hours must be completed in the social sciences. Nine (9) elective hours are required in the humanities, exclusive of foreign language. Three of the humanities hours must be literature. Three (3) of the humanities hours are to be in courses numbered 12xx at the 100-level or higher.

Students planning to attend graduate school are encouraged to incorporate additional higher level chemistry electives, math, and foreign language, including a scientific literature course.

~~Students planning to attend graduate school are encouraged to incorporate additional higher level chemistry electives, math, and foreign language, including a scientific literature course.~~ Recommended courses include but are not limited to the following:

- Biology, 2xxx, 3xxx and 4xxx level, especially [BIO SCI 211](#), or [BIO SCI 331 & BIO SCI 332](#)
- ~~Biology, 200 and 300-level, especially BIO SCI 214~~ Math 2xxx, 3xxx 200 and 4xxx 300-level, especially [MATH 204](#), [MATH 208](#) & [MATH 325](#)
- Physics 2xxx, 3xxx 200 and 4xxx 300-level, especially [PHYSICS 208](#), [PHYSICS 221](#), [PHYSICS 323](#), [PHYSICS 377](#), or [PHYSICS 381](#) ~~PHYSICS 323 & PHYSICS 344~~
- Statistics, 2xxx, 3xxx and 4xxx 200 & 300-level, especially [STAT 343](#), [STAT 346](#) or ~~STAT 346 & STAT 353~~
- CER ENG 291 and CER ENG 292, or GEO 275
- ~~CER ENG 301~~ and CER ENG 302, or [GEOLOGY 381](#) A foreign language series.

Students who plan to teach high school chemistry should consult the Education section of this catalog.

Chemistry

Biochemistry Emphasis Area

Freshman Year			
First Semester	Credits	Second Semester	Credits
CHEM 1	4	CHEM 3	3
CHEM 2	1	CHEM 8	2
CHEM 4	1	MATH 21	5
CHEM 11	1	BIO SCI 211	3
MATH 8	5	BIO SCI 212	1
ENGLISH 20	3	Humanities Elective	3
HISTORY 112, or 175, or 176, or POL SCI 90	3		
		18	17
Sophomore Year			
First Semester	Credits	Second Semester	Credits
CHEM 221	4	CHEM 223	4
CHEM 226	1	CHEM 228	1
MATH 22	4	PHYSICS 25	4
PHYSICS 21	4	PHYSICS 26	1
PHYSICS 22	1	COMP SCI 53 or 74 and 78	3
Literature Elective	3	COMP SCI 74 & COMP SCI 78	3
		STAT 213	3
		17	16
Junior Year			
First Semester	Credits	Second Semester	Credits
CHEM 343	3	CHEM 151	4
CHEM 361	3	CHEM 241	3
CHEM 362	2	CHEM 242	1

ENGLISH 60	3	CHEM 363	3
Social Sciences Elective	3	Humanities Elective	3
Electives	3	Electives	2
	17		16
Senior Year			
First Semester	Credits	Second Semester	Credits
CHEM 243	3	CHEM 237	3
CHEM 244	1	CHEM 238	1
CHEM 251	4	CHEM 300	1
CHEM 310 or 390	1	CHEM 310 or 390	1
BIO SCI 331	3	CHEM 328	3
Elective	3	Social Sciences Elective	3
		Elective	3
	15		15
Total Credits: 131			

Notes:

Grade Requirements: Students must complete a minimum of 131 credit hours for the Bachelor of Science in Chemistry degree. A minimum grade of "C" is required for each Chemistry course counted towards the degree.

ROTC: Basic ROTC may be taken in the freshman and sophomore years, but is not countable towards a degree.

Electives: There are eleven (11) hours of electives. **Students planning to attend graduate school are encouraged to incorporate additional higher level chemistry electives, math, and foreign language, including a scientific literature course. Three of the humanities hours must be literature. Three (3) of the humanities hours are to be in Recommended courses numbered 12xx or higher. Recommended courses include but are not limited to the following:**

- ~~Students planning to attend graduate school are encouraged to incorporate additional higher level chemistry electives, math, and foreign language, including a scientific literature course. Recommended courses include but are not limited to the following:~~ Biology, ~~2xxx, 3xxx 200~~ and ~~4xxx 300~~ especially [BIO SCI 315](#), [BIO SCI 335](#), [BIO SCI 370](#), [BIO SCI 375](#), & ~~BIO SCI 383~~ [BIO SCI 383](#)
- Math ~~2xxx, 3xxx 200~~ and ~~4xxx 300~~ level, especially [MATH 204](#), [MATH 208](#) and [MATH 325](#)
- Physics ~~2xxx, 3xxx 200~~ and ~~4xxx 300~~ level, especially [PHYSICS 208](#), [PHYSICS 221](#), & [PHYSICS 323](#)
- Statistics, ~~2xxx, 3xxx and 4xxx 200 & 300~~ level, especially [STAT 343](#), [STAT 346](#) & [STAT 353](#)
- A foreign language series, French, German or Russian are recommended.

Polymer & Coatings Science Emphasis Area

Freshman Year			
First Semester	Credits	Second Semester	Credits
CHEM 1	4	CHEM 3	3
CHEM 2	1	CHEM 8	2
CHEM 4	1	MATH 21	5
CHEM 11	1	Electives	6
MATH 8	5		
ENGLISH 20	3		
HISTORY 112 , or 175 , or 176 , or POL SCI 90	3		
	18		16
Sophomore Year			
First Semester	Credits	Second Semester	Credits
CHEM 221	4	CHEM 223	4
CHEM 226	1	CHEM 228	1
MATH 22	4	PHYSICS 25	4
PHYSICS 21	4	PHYSICS 26	1
PHYSICS 22	1	COMP SCI 53 or 74 and 78	3
Electives	3	COMP SCI 74 & COMP SCI 78	3
		STAT 213	3
	17		16
Junior Year			
First Semester	Credits	Second Semester	Credits
CHEM 343	3	CHEM 151	4
CHEM 381	3	CHEM 241	3
CHEM 361	3	CHEM 242	1
ENGLISH 60	3	CHEM 384	3
Electives	4	CHEM 385	3
		CHEM 390	3

16		17	
Senior Year			
First Semester	Credits	Second Semester	Credits
CHEM 243	3	CHEM 237	3
CHEM 244	1	CHEM 238	1
CHEM 251	4	CHEM 328	3
CHEM ENG 349	3	Chemistry Electives	3
Electives	6	Electives	4
17		14	
Total Credits: 131			

Notes:

Grade Requirements: Students must complete a minimum of 131 credit hours for a Bachelor of Science-Chemistry degree. A minimum grade of "C" is required for each Chemistry course counted towards the degree.

ROTC: Basic ROTC may be taken in the freshman and sophomore years, but is not countable towards a degree.

CHEM 390 Undergraduate Research: The undergraduate research must be done in Polymers and Coatings Science.

Electives: There are twenty-six (26) hours of electives. Six (6) elective hours must be completed in the social sciences. Nine (9) elective hours are required in the humanities, exclusive of foreign language.

Three of the humanities hours must be literature. ~~Three of the humanities hours must be literature.~~ Three of the humanities hours are to be in courses numbered 12xx or at the 100 level or higher. Three (3) hours of elective may be chosen from Materials Science related courses numbered in the 3xxx- or 4xxx-series. ~~300-series.~~

Students planning to attend graduate school are encouraged to incorporate additional higher level chemistry electives, math, and foreign language, including a scientific literature course.

Recommended courses include but are not limited to the following:

- Biology, 2xxx, 3xxx and 4xxx level, especially [BIO SCI 211](#), or BIO SCI 331 & BIO SCI 332
- CH ENG 381
- Math 2xxx, 3xxx and 4xxx level, especially [MATH 204](#), [MATH 208](#) & [MATH 325](#)
- Physics 2xxx, 3xxx and 4xxx level, especially [PHYSICS 208](#), [PHYSICS 221](#), [PHYSICS 323](#), [PHYSICS 377](#), or [PHYSICS 381](#)
- Statistics, 2xxx, 3xxx and 4xxx level, especially [STAT 343](#), [STAT 346](#) or [STAT 353](#)
- CER ENG 291 and CER ENG 292, or GEO 275
- ~~Students planning to attend graduate school are encouraged to incorporate additional higher level chemistry electives, math, and foreign language, including a scientific literature course. Recommended courses include but are not limited to the following: Biology, 200 and 300 level, especially BIO SCI 211 Math 200 and 300 level, especially MATH 204, MATH 208 and MATH 325 Physics 200 and 300 level, especially PHYSICS 208, PHYSICS 221, PHYSICS 323 & [PHYSICS 344](#) Statistics, 200 & 300 level, especially STAT 343, STAT 346 & STAT 353 [CER ENG 304](#) and CER ENG 302, or [GEOLOGY 384](#)~~

A foreign language series.

Pre-medicine Emphasis Area

Freshman Year			
First Semester	Credits	Second Semester	Credits
CHEM 1	4	CHEM 3	3
CHEM 2	1	CHEM 8	2
CHEM 4	1	MATH 21	5
CHEM 11	1	BIO SCI 110	3
MATH 8	5	BIO SCI 112	2
HISTORY 112 , or 175 , or 176 , or POL SCI 90	3	ENGLISH 20	3
15		18	
Sophomore Year			
First Semester	Credits	Second Semester	Credits
CHEM 221	4	CHEM 223	4
CHEM 226	1	CHEM 228	1
MATH 22	4	PHYSICS 25	4
PHYSICS 21	4	PHYSICS 26	1
PHYSICS 22	1	COMP SCI 53 or 74 and 78	3
BIO SCI 211	3	COMP SCI 74 & COMP SCI 78	3
BIO SCI 212	1	STAT 213	3
18		16	
Junior Year			
First Semester	Credits	Second Semester	Credits
CHEM 343	3	CHEM 151	4
CHEM 361	3	CHEM 241	3
CHEM 362	2	CHEM 242	1
ENGLISH 60	3	CHEM 363	3
BIO SCI 241	5	BIO SCI 242	3
CHEM 310 or 390	1	Humanities Elective	3

	17		17
Senior Year			
First Semester	Credits	Second Semester	Credits
CHEM 243	3	CHEM 237	3
CHEM 244	1	CHEM 238	1
CHEM 251	4	CHEM 328	3
CHEM 310 or 390	1	Advanced Chemistry Electives	4
Social Sciences Elective	3	Social Sciences Elective	3
Literature Elective	3	Humanities Elective	3
	15		17
Total Credits: 133			

Notes:

Grade Requirements: Students must complete a minimum of 133 credit hours for the Bachelor of Science in Chemistry degree. A minimum grade of "C" is required for each Chemistry course counted towards the degree.

ROTC: Basic ROTC may be taken in the freshman and sophomore years, but is not countable towards a degree.

Chemistry Electives: The advanced Chemistry Elective is chosen from [CHEM 321](#), [CHEM 331](#), [CHEM 346](#), [CHEM 381](#), [CHEM 385](#).

Electives: At least three hours of the humanities or literature electives are to be **in courses numbered 12xx or at the 100 level or higher**.

Justification for request The changes update the B.S. program for the new four digit numbering system, including 'new' 4xxx level course designations and 5xxx and higher course specifications, and to correct for non-existent courses in other departments.

Supporting Documents

Course Reviewer **woelkk (11/20/13 2:34 pm):** Rollback: need to fix the CompSci courses
Comments

Program Change Request

Date Submitted: 10/30/13 9:47 am

Viewing: **CHEM-MI : Chemistry Minor**

File: 17.1

Last edit: 11/21/13 11:02 am

Changes proposed by: tschuman

Catalog Pages [Chemistry](#)
Using this
Program

Start Term **Fall 2014**
Program Code CHEM-MI
Department Chemistry
Title Chemistry Minor

In Workflow

1. RCHEMIST Chair
2. CCC Secretary
3. Sciences DSCC Chair
4. CCC Meeting Agenda
5. Campus Curricula Committee Chair
6. FS Meeting Agenda
7. Faculty Senate Chair
8. Registrar
9. Peoplesoft

Approval Path

1. 11/20/13 2:33 pm woelkk: Approved for RCHEMIST Chair
2. 11/21/13 11:02 am lahne: Approved for CCC Secretary
3. 12/06/13 12:54 pm tauritzd: Approved for Sciences DSCC Chair

Program Requirements and Description**Minor in Chemistry**

A minor in chemistry requires a minimum of 19 hours of chemistry course work selected in conjunction with a chemistry faculty advisor. The required courses are [CHEM 1](#), [CHEM 2](#), [CHEM 3](#), [CHEM 4](#), [CHEM 8](#), [CHEM 221](#) and either [CHEM 224](#) or [CHEM 226](#). Three additional hours of chemistry are to be selected from [CHEM 151](#), or other Chem **2000**, **3000**, ~~200~~ and **4000-level** ~~300-level~~ courses.

Justification for request To update program for the four digit numbering system to include 'new' 4xxx course level

Supporting Documents

Course Reviewer Comments

Key: 17

Program Change Request

Date Submitted: 09/24/13 12:29 pm

Viewing: **GL&GPH-BS : Geology and Geophysics BS**

File: 64.1

Last edit: 12/16/13 9:48 am

Changes proposed by: ikuenobe

In Workflow

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

Catalog Pages Geology and Geophysics
Using this Program

Start Term **Fall 2014**
Program Code GL&GPH-BS
Department Geological Science and Engineering
Title Geology and Geophysics BS

Approval Path

1. 10/30/13 2:37 pm refflori: Approved for RGEOSENG Chair
2. 11/21/13 10:57 am lahne: Approved for CCC Secretary
3. 12/03/13 2:05 pm sraper: Rollback to CCC Secretary for Engineering DSCC Chair
4. 12/03/13 2:11 pm lahne: Approved for CCC Secretary
5. 12/13/13 4:44 pm tauritzd: Approved for Sciences DSCC Chair

Program Requirements and Description

**Bachelor of Science
Geology and Geophysics**

A minimum of ~~127~~ **129** credit hours is required for a Bachelor of Science degree in Geology and **Geophysics**. **Students must average at least two grade points per credit hour Geophysics and must obtain a letter grade of "C" or better in all Geology and Geophysics courses. an average of at least two grade points per credit hour must be obtained.**

~~The Geology and Geophysics curriculum requires nine semester hours in humanities, exclusive of a foreign language, and must include ENGLISH 60. The Geology~~ A minimum of ~~six semester hours is required in social sciences~~ and **Geophysics curriculum requires nine elective hours in humanities, and must include ENGLISH 20 and ENGLISH 60, either ECON 121 or ECON 122, and either ECON 122 and either HISTORY 112, HISTORY 175, HISTORY 176 or POL SCI 90. Six semester hours of course work are available to the student to choose course work that best fits their individual needs for completion of the degree.** Specific requirements for the bachelor degree program are outlined in the sample program below

Freshman Year					
First Semester	Credits	Second Semester	Credits		
MATH 4	3	GEOLOGY 52 ¹	3		
MATH 6 (or 2 hours free electives)	2	GEOLOGY 54 ¹	1		
GEOLOGY 51	3	MATH 8 ²	5		
GEOLOGY 53	1	Elective (Science & Eng) ³	3		
Free Elective ⁴	4	Humanities/Social Science Elective	3		
ENGLISH 20	3				
CHEM 1	4				
CHEM 2	1				
CHEM 4	1				
	13		15		
Sophomore Year					
First Semester	Credits	Second Semester	Credits	Summer Semester	Credits
GEOLOGY 113	4	GEOLOGY 130 ¹	4	GEOLOGY 373	3
GEOLOGY 338, or COMP SCI 63 and COMP SCI 71 and COMP SCI 77, or COMP SCI 63 and COMP SCI 73 and COMP SCI 77	3	GEOLOGY 275	3		
GEOPHYS 270	3	Hum/Soc-Sci Elective	3		
MATH 21 ²	5	ENGLISH 60 or 160	3		
COMP SCI 73 & COMP SCI 77 (or COMP SCI 74 & COMP SCI 78)	3	ECON 121 or 122	3		
		HISTORY 112, or 175, or 176, or POL SCI 90	3		
	15		16		3
Junior Year					

First Semester	Credits	Second Semester	Credits	Summer Semester	Credits
GEOLOGY 220 ¹	4	GEOLOGY 223	3	GEOLOGY 374	3
PHYSICS 23 ⁴	4	Elective (Geo & Geop)⁴	3		
STAT 213 , or 215 , or 217 , or GEO ENG 315	3	GEOLOGY 224	1		
Elective (Geo & Geop) ⁵	3	PHYSICS 24 ⁴	4		
		Elective (Geo & Geop)⁵	6		
		Hum/Soc Sci Elective	3		
		Free Elective⁴	3		
	14		17		3
Senior Year					
First Semester	Credits	Second Semester	Credits		
GEOLOGY 310	1	GEOPHYS 381 ¹	3		
Humanities/Social Sciences Elective	3	GEOLOGY 344	3		
Elective (Science & Eng) ³	6	Elective (Science & Eng) ³	6		
Elective (Geo & Geop)⁵	6	Electives (Geo & Geop)⁴	6		
Elective (Geo & Geop)⁴	3	Free Elective⁶	3		
	16		15		
Total Credits: 127					

- ¹ Communications Emphasized (CE) courses
- ² Students may substitute [MATH 14](#) for [MATH 8](#); [MATH 15](#) for [MATH 22](#).
- ³ All Geology/Geophysics students must complete at least 15 hours of elective course work in science (which may include additional Geology/Geophysics courses), mathematics, and/or engineering, courses required for the basic program. 12 hours of this course work must be numbered 2000 or above.
- ⁴ Students may substitute [PHYSICS 21](#) and [PHYSICS 22](#) for [PHYSICS 23](#); [PHYSICS 25](#) and [PHYSICS 26](#) for [PHYSICS 24](#).
- ⁵ All Geology and Geophysics students must complete at least 15 hours of elective course work numbered 2000 or above in the Department of Geology and Geophysics, in addition to the required core curriculum.
- ⁶ Free elective hours may be taken in any combination of credit hours (1, 2, 3, etc.) and can include any course offerings at the University.

Core Curriculum Geochemistry Emphasis Area In addition, to complete degree requirements with an emphasis area in Groundwater and Environmental Geology students must complete 4 courses (12 hours minimum) to be selected from an approval list and with guidance from student's advisor. **General Geology Emphasis Area** In addition to complete degree requirements with an emphasis area in General Geology students must complete 4 courses (12 hrs. minimum) to be selected from an approved list and with guidance from student's advisor. **Core Curriculum**

Taken by all students in Geology & Geophysics.		
GEOLOGY 51	Physical And Environmental Geology	3
GEOLOGY 53	Physical and Environmental Geology Laboratory	1
GEOLOGY 52	Evolution Of The Earth	3
GEOLOGY 54	Evolution of the Earth Laboratory ⁵	1
GEOLOGY 113	Mineralogy And Crystallography	4
GEOLOGY 130	Igneous And Metamorphic Petrology	4
GEOLOGY 220	Structural Geology	4
GEOLOGY 223	Stratigraphy And Sedimentation	3
GEOLOGY 224	Stratigraphy Lab	1
GEOPHYS 270	Introduction to Geophysics	3
GEOLOGY 275	Introduction To Geochemistry	3
GEOLOGY 310	Seminar	1
GEOLOGY 344	Remote Sensing Technology	3
GEOLOGY 373	Field Geology	3
GEOLOGY 374	Advanced Field Geology	3
GEOPHYS 381	Global Tectonics	3
Total Credits		43

Geology Geophysics Emphasis Area Groundwater and Geophysics Focus Areas Environmental

The following courses are required:		
MATH 22	Calculus With Analytic Geometry III	4
GEOPHYS 286	Introduction To Geophysical Data Analysis	3
GEOPHYS 320	Computational Geophysics	3
GEOPHYS 377	Seismic Interpretation	3

Total Credits

0

Geochemistry

Students should complete at least 5 courses (15 hours minimum) from the list. Students may also choose additional courses to be selected from an approval list and with guidance from student's advisor.

GEOLOGY 234	Course GEOLOGY 234 Not Found	3
GEOLOGY 275	Introduction To Geochemistry	3
GEOLOGY 294	Metallic And Industrial Mineral Deposits	3
GEOLOGY 330	Granites And Rhyolites	4
GEOLOGY 334	Advanced Igneous and Metamorphic Petrology	4
GEOLOGY 372	Geological Field Studies	3
GEOLOGY 375	Applied Geochemistry	3
GEOLOGY 376	Aqueous Geochemistry	3
GEOLOGY 378	Isotope Geochemistry	3

General Geology

Students should complete at least 5 courses (15 hours minimum) from the list. Students may also choose additional courses to be selected from an approval list and with guidance from student's advisor.

GEOLOGY 227	Systematic Paleontology	3
GEOLOGY 275	Introduction To Geochemistry	3
GEOLOGY 234	Course GEOLOGY 234 Not Found	3
GEOLOGY 294	Metallic And Industrial Mineral Deposits	3
GEOLOGY 248	Fundamentals Of Geographic Information Systems	3
GEOLOGY 320	Advanced Structural Geology	3
GEOLOGY 329	Micropaleontology	3
GEOLOGY 330	Granites And Rhyolites	4
GEOLOGY 334	Advanced Igneous and Metamorphic Petrology	4
GEOLOGY 340	Petroleum Geology	3
GEOLOGY 350	Paleoclimatology and Paleocology	3
GEOLOGY 372	Geological Field Studies	3
GEO ENG 275	Geomorphology And Terrain Analysis	3

Geophysics

Students must choose 1 math and 3 geophysics courses from the list. Students should also choose at least one additional course to be selected from an approved list and with guidance from student's advisor.

MATH 22	Calculus With Analytic Geometry III	4
MATH 204	Elementary Differential Equations	3
MATH 208	Linear Algebra I	3
MATH 325	Partial Differential Equations	3
GEOPHYS 320	Computational Geophysics	3
GEOPHYS 377	Seismic Interpretation	3
GEOPHYS 336	Geophysical Field Methods	3
GEOLOGY 340	Petroleum Geology	3
GEOPHYS 382	Environmental And Engineering Geophysics	3
GEOPHYS 385	Exploration And Development Seismology	3
GEOPHYS 389	Seismic Data Processing	3

Groundwater Emphasis Area In addition, to complete degree requirements with an emphasis area in Groundwater and Environmental Geochemistry

Students should complete at least 5 courses (15 hours minimum) from the list. Students may also choose additional courses to be selected from an approval list and with guidance from student's advisor.

GEOLOGY 275	Introduction To Geochemistry	3
GEOLOGY 360	Methods Of Karst Hydrogeology	3
GEOLOGY 305	Hydrogeology	3
GEOLOGY 350	Paleoclimatology and Paleocology	3
GEOLOGY 375	Applied Geochemistry	3
GEOLOGY 376	Aqueous Geochemistry	3
GEO ENG 335	Environmental Geological Engineering	3

er-GEO ENG 334	Subsurface Hydrology	
GEOPHYS 382	Environmental And Engineering Geophysics	3
BIO SCI 151	Introduction to Environmental Sciences	3
ENV ENG 261	Fundamentals of Environmental Engineering and Science	3
ENV ENG 360	Environmental Law And Regulations	3
GEO ENG 331	Subsurface Hydrology	3
GEO ENG 337	Geological Aspects Of Hazardous Waste Management	3

Petroleum Geology

Students should complete at least 5 courses (15 hours minimum) from the list. Students may also choose additional courses to be selected from an approval list and with guidance from student's advisor.

GEOLOGY 227	Systematic Paleontology	3
GEOLOGY 276	Introduction To Geochemistry	3
GEOLOGY 324	Advanced Stratigraphy And Basin Evolution	3
GEOLOGY 338	Computer Mapping In Geology	3
GEOLOGY 329	Micropaleontology	3
GEOLOGY 332	Depositional Systems	3
GEOLOGY 340	Petroleum Geology	3
GEOLOGY 385	Course GEOLOGY 385 Not Found	3
GEOPHYS 385	Exploration And Development Seismology	3
PET ENG 232	Well Logging I	3

~~Geology students must complete 4 courses (12 hrs. minimum) to be selected from an approval list and with guidance from student's advisor. Petroleum Geology Emphasis Area In addition, to complete degree requirements with an emphasis area in Petroleum Geology students must complete two courses (6 hours minimum) to be selected from an approval list and with guidance from student's advisor.~~

Justification for request: Several modifications have been made to the Bachelor of Science degree curriculum as follows:
 1) reduced total credit hours from 129 to 127; 2) changed sequencing of some courses to reflect the semesters during which they are currently offered; 3) renamed emphasis areas "focus areas"; and 4) revised the list of courses in each focus area.

Supporting Documents:

Course Reviewer Comments: **sraper (12/03/13 2:05 pm):** Rollback: should this be science DSCC? Also note 127 hours.

Program Change Request

Date Submitted: 09/27/13 9:09 am

Viewing: **PHYSIC-BS : Physics BS**

File: 115.1

Last edit: 11/27/13 11:06 am

Changes proposed by: waddill

Catalog Pages [Physics](#)
Using this Program

Start Term **Fall 2014**
Program Code PHYSIC-BS
Department Physics
Title Physics BS

In Workflow

1. RPHYSICS Chair
2. CCC Secretary
3. Sciences DSCC Chair
4. CCC Meeting Agenda
5. Campus Curricula Committee Chair
6. FS Meeting Agenda
7. Faculty Senate Chair
8. Registrar
9. Peoplesoft

Approval Path

1. 09/27/13 9:14 am waddill: Approved for RPHYSICS Chair
2. 09/27/13 3:42 pm lahne: Approved for CCC Secretary
3. 11/14/13 12:04 pm lahne: Rollback to CCC Secretary for Sciences DSCC Chair
4. 11/18/13 12:40 pm lahne: Approved for CCC Secretary
5. 11/18/13 1:00 pm tauritzd: Approved for Sciences DSCC Chair

Program Requirements and Description

Bachelor of Science Physics

A minimum of 128 credit hours is required for a Bachelor of Science degree in Physics and an average of at least two grade points per credit hour must be obtained. These requirements for the B.S. degree are in addition to credit received for algebra, trigonometry, and basic ROTC.

The Physics curriculum requires twelve semester hours in humanities, exclusive of foreign language, and must include **ENGLISH 60** and ~~ENGLISH 60~~ or **ENGLISH 160**. A minimum of nine semester hours is required in social sciences, including either **HISTORY 175**, **HISTORY 176**, **HISTORY 112**, or **POL SCI 90**, ~~POL SCI 90~~ or ~~POL SCI 176~~. Specific requirements for the bachelor degree are outlined in the sample program listed below

Freshman Year			
First Semester	Credits	Second Semester	Credits
CHEM 1	4	CHEM 3	3
CHEM 2	1	HISTORY 112 , or 175 , or 176 , or POL SCI 90	3
CHEM 4	1	MATH 21	5
ENGLISH 20	3	PHYSICS 21	4
MATH 8	5	PHYSICS 22	1
PHYSICS 1	1		
	15		16
Sophomore Year			
First Semester	Credits	Second Semester	Credits
ENGLISH 60	3	MATH 204	3
MATH 22	4	PHYSICS 207	3
PHYSICS 25	4	PHYSICS 212	3
PHYSICS 26	1	PHYSICS 208	3
COMP SCI 53 & COMP SCI 54 ⁴	4	Elective ¹	3
Elective ¹	3		
	19		15
Junior Year			
First Semester	Credits	Second Semester	Credits
PHYSICS 308	3	PHYSICS 221	3
PHYSICS 322	3	PHYSICS 332	3
PHYSICS 307	3	Math/Stat Elective ²	3
Math/Stat Elective ²	3	Electives ¹	5
Electives ¹	6		
	18		14

Senior Year			
First Semester	Credits	Second Semester	Credits
PHYSICS 321	3	PHYSICS 311	3
PHYSICS 361	3	Elective-Humanities (300 level) ¹	3
Physics Elective ³	3	Physics Elective ³	3
Electives ¹	6	Electives ¹	6
	15		15
Total Credits: 127			

Note: The minimum credit hours required for a Bachelor of Science in Physics is 128 hours. No more than two of the required physics and mathematics courses with a grade of "D" may be used to meet graduation requirements. Upon petition to and approval by the physics faculty, three semester hours of advanced ROTC (Military Science or Aerospace Credit Studies) credit can be counted as elective credit to meet requirements for graduation.

- ¹ Electives, in addition to the Math/Stat electives² and Physics electives³, shall include six hours of social studies and nine hours of humanities, at least three of which must be literature and at least three of which must be at the 3000 level or above not including Special Problems courses ([PHILOS 345](#) recommended). Nineteen hours of free electives may be used to develop an emphasis area. Eighteen hours of elective credit shall be in courses at the 3000 level or above.
- ² Six hours of mathematics or statistics beyond [MATH 204](#) are required. [MATH 208](#), [MATH 322](#), [MATH 325](#), or [MATH 351](#) are recommended.
- ³ In addition to the specific physics courses listed ([PHYSICS 307](#), [PHYSICS 308](#), [PHYSICS 311](#), [PHYSICS 321](#), [PHYSICS 322](#), [PHYSICS 332](#), and [PHYSICS 361](#)) two other physics 3000 level or higher courses are required.
- ⁴ **Alternatively COMP SCI 73 & COMP SCI 77, or COMP SCI 74 & COMP SCI 78; note that this will require one less credit hour than the option listed in the sample schedule.**

Students may develop an emphasis area in secondary education by satisfying the requirements for a Bachelor of Science in Physics and by completing the following additional requirements:

a. Take the education Professional Requirements courses:

EDUC 40	Perspectives In Education	2
EDUC 174	School Organization & Adm For Elementary & Secondary Teachers	2
EDUC 216	Teaching Reading In Content Area	3
EDUC 251	Historical Foundation Of American Education	3
EDUC 280	Teaching Methods And Skills In The Content Areas	6
EDUC 298	Student Teaching Seminar	1
PSYCH 155	Educational Psychology	3
PSYCH 208	Psychological & Educational Development Of The Adolescent	3
PSYCH 354	Psychology Of The Exceptional Child	3

Fifteen of these credit hours may be used to substitute for six hours of mathematics electives, six hours of physics electives, and three hours of computer science courses.

b. Take the education Clinical Experience courses:

EDUC 104	Teacher Field Experience	2
EDUC 164	Aiding Elementary, Middle And Secondary Schools	2
EDUC 299	Student Teaching	12

c. Take these additional courses:

SP&M S 85	Principles Of Speech	3
POL SCI 90	American Government	3
PSYCH 50	General Psychology	3
BIO SCI 110	General Biology	3
PHYSICS 6	Environmental Physics I	3
HISTORY 275	History Of Science	3
A 3 hour Art/Music/Theater elective		3

d. Complete the requirements for teacher certification listed in this catalog.

e. [PHYSICS 23](#), ~~[PHYSICS 23](#)~~ and [PHYSICS 24](#) may be substituted for:

PHYSICS 21	General Physics I	4
PHYSICS 22	General Physics Laboratory	1
PHYSICS 25	General Physics II	4
PHYSICS 26	General Physics Laboratory	1

[MATH 14](#) and [MATH 15](#), ~~[MATH 15](#)~~ may be substituted for:

MATH 8	Calculus With Analytic Geometry I	5
MATH 21	Calculus With Analytic Geometry II	5

Justification for request To update reflecting new course renumbering scheme.

Supporting Documents

Course Reviewer Comments **lahne (11/14/13 12:04 pm):** Rollback: please adjust plan of study requirements.

Key: 115

Program Change Request

Date Submitted: 10/24/13 3:23 pm

Viewing: **PSYCH-BS : Psychology BS**

File: 193.1

Last edit: 10/24/13 3:23 pm

Changes proposed by: nstone

In Workflow

1. RPSYCHOL Chair
2. CCC Secretary
3. Social Sciences DSCC Chair
4. CCC Meeting Agenda
5. Campus Curricula Committee Chair
6. FS Meeting Agenda
7. Faculty Senate Chair
8. Registrar
9. Peoplesoft

Catalog Pages [Psychology](#)
Using this Program

Start Term **Fall 2014**
Program Code PSYCH-BS
Department Psychological Science
Title Psychology BS

Approval Path

1. 10/24/13 3:24 pm nstone: Approved for RPSYCHOL Chair
2. 11/21/13 11:03 am lahne: Approved for CCC Secretary
3. 11/21/13 6:43 pm barryf: Approved for Social Sciences DSCC Chair

Program Requirements and Description

Bachelor of Science Psychology

A minimum of 124 credit hours is required for a Bachelor of Science degree in Psychology and a cumulative grade point average of 2.0 must be obtained. These requirements for the B.S. degree are in addition to credit received for basic ROTC.

The Psychology Bachelor of Science curriculum requires six hours of English composition; 23 hours of math, science and computer science; and twelve semester hours in humanities. Specific requirements for the bachelor degree are outlined in the sample program listed below.

1. ENGLISH 20 and ENGLISH 60 (entering students will normally take ENGLISH 20 either semester of the first year.) (6 hours)
2. A total of 23 hours in biological, physical, (chemistry, geology and geophysics, and physics), and mathematical (mathematics/statistics and computer science or information science & technology) sciences, to include COMP SCI 53 and include ~~COMP SCI 53 and COMP SCI 54~~; or COMP SCI 73 and COMP SCI 77; or COMP SCI 74 and COMP SCI 78; or IST 51 or ~~COMP SCI 73 and COMP SCI 77; or COMP SCI 74 and COMP SCI 78; or IS&T 54~~ and at least one course taken in the biological and one in the physical sciences. Of the biological and physical science offering, at least one must be a laboratory course. Engineering courses may, at the discretion of the student's major advisor, also count toward this total requirement. (23 hours)
3. 12 hours in humanities and fine arts (literature, philosophy, art, music, or theater). Foreign language courses may count toward fulfilling this requirement. Courses used to satisfy this requirement must be taken in at least two humanities areas. (12 hours)
4. 12 hours in at least two social sciences fields outside the major area (economics or history or political science). A course in Modern Western Civilization (HISTORY 112), American History To 1877 (HISTORY 175) or American History Since 1877 (HISTORY 176), or American Government (POL SCI 90) must be taken to satisfy the requirement of the state of Missouri (the "Williams Law"), and this course may count toward fulfilling the social sciences requirement. (12 hours)
5. Minor: A minor will be selected from any discipline other than the major with the approval of the student's 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.
6. Basic ROTC may be elected in the freshman and sophomore years, but is not creditable toward a degree. Six credit hours of advanced ROTC may be credited toward a degree.
7. Elective Credits: In consultation with his/her advisor, each student will elect sufficient additional courses to complete a minimum of 124 credit hours which may include MATH 2 or MATH 4 and MATH 6.
8. Psychology Requirements:
 - a. Introduction to Psychology (PSYCH 10), General Psychology (PSYCH 50), Research Methods (PSYCH 140) and Capstone course (PSYCH 302, PSYCH 310, PSYCH 350, PSYCH 375, PSYCH 377, ~~PSYCH 376, PSYCH 377, PSYCH 380~~, or PSYCH 390, 3 hours credit).
 - b. Three additional courses from each of the following two areas of Psychology:
 - i. Sensation & Perception, Cognitive, Learning, Neuroscience, Developmental, Abnormal, Social, or Personality
 - ii. Educational, Adolescent, Human-Computer Interaction, Industrial, Human Factors, Clinical, Group Dynamics, or Organizational
 - c. Electives from Psychology to complete a requirement of 34 hours.
 - d. A cumulative grade point average of 2.0 must be earned in all course work taken in the major field. Upper class (200- and 300-level) courses completed with grades of "D" may not be included in the major field without the approval of the advisor and the chair of the department concerned.

Emphasis Areas

Note: The following areas identify courses from which a student may opt to develop an emphasis area. It is not required that students obtain an emphasis specialty within Psychology.

Human Resources/Personnel		
PSYCH 307	Industrial Psychology	3
PSYCH 308	Social Psychology	3
PSYCH 372	Group Dynamics	3
PSYCH 374	Organizational Psychology	3
Human Services		
PSYCH 208	Psychological & Educational Development Of The Adolescent	3
or PSYCH 250	Developmental Psychology	
PSYCH 362	Abnormal Psychology	3

PSYCH 360	Personality Theory	3
PSYCH 368	Clinical Psychology	3
Cognitive Neuroscience		
PSYCH 340	Sensation and Perception	3
PSYCH 240	Theories Of Learning	3
or PSYCH 362	Abnormal Psychology	
PSYCH 305	Cognitive Psychology	3
PSYCH 330	Neuroscience	3
Usability of Technology		
PSYCH 155	Educational Psychology	3
PSYCH 211	Web Design And Development	3
PSYCH 311	Human Factors	3
PSYCH 314	Human-Computer Interaction	3
Psychology of Leadership		
PSYCH 308	Social Psychology	3
or PSYCH 378	Social Influence: Science and Practice	
PSYCH 316	Psychology of Leadership in Organizations	3
PSYCH 350	Psychology of Women	3
or PSYCH 372	Group Dynamics	
PSYCH 374	Organizational Psychology	3

Bachelor of Science Psychology (Secondary Education Emphasis Area)

You may earn a B.S. Degree in Psychology from Missouri S&T and certification to teach at the secondary level in the schools of Missouri with the Secondary Education emphasis area program. This program can be completed in four academic years and student teaching is arranged with public schools within 30 miles of the Rolla campus.

Students interested in this emphasis area should consult with the advisor for the Secondary Education Emphasis Area in the Department of Psychological Science.

In order to successfully complete this emphasis area, students must have at least 22 on the ACT, maintain a cumulative GPA of at least 2.5, and attain at least a 2.5 GPA in all Psychology courses. Current Missouri S&T or transfer students who wish to pursue this emphasis area must meet both of these GPA requirements to be accepted into the program. Students must also meet all requirements listed under the Teacher Education Program in this catalog. Students who do not meet all the teacher certification requirements will not be eligible for the Secondary Education Emphasis Area, even if they have completed all course work.

A degree in this emphasis area requires 136 credit hours. The required courses are provided below.

Communications Skills: 9 semester hours		
ENGLISH 20	Exposition And Argumentation	3
ENGLISH 60	Writing And Research	3
SP&M S 85	Principles Of Speech	3
Humanities: 12 semester hours		
One must be in Art, Music, or Theatre		3
One must be in Philosophy		3
One must be in Literature		3
One additional humanities from the above course groups, Foreign Language, or Etymology		3-4
Social Sciences: 18 semester hours		
HISTORY 175	American History To 1877	3
or HISTORY 176	American History Since 1877	
POL SCI 90	American Government	3
POL SCI 237	Contemporary Political Thought	3
or POL SCI 290	American Political Parties	
or POL SCI 315	Principles Of Public Policy	
or POL SCI 316	The American Presidency	
PSYCH 50	General Psychology	3
ECON 121	Principles Of Microeconomics	3
or ECON 122	Principles Of Macroeconomics	
Geography		3
Natural Sciences/Mathematics: 21 semester hours		
Physics, Chemistry or Geology		3-4
Mathematics		3
BIO SCI 110	General Biology	3
STAT 115	Statistics For The Social Sciences I	3

COMP SCI 53 & COMP SCI 54	Introduction To Programming and Introduction To Programming Laboratory	3-4
or COMP SCI 73 & COMP SCI 77	Basic Scientific Programming and Computer Programming Laboratory	
or COMP SCI 74 & COMP SCI 78	Introduction To Programming Methodology and Programming Methodology Laboratory	
5-6 additional hours of Math &/or Science courses		5-6
Professional Requirements: 26 semester hours		
EDUC 40	Perspectives In Education	2
EDUC 174	School Organization & Adm For Elementary & Secondary Teachers	2
EDUC 216	Teaching Reading In Content Area	3
EDUC 251	Historical Foundation Of American Education	3
EDUC 280	Teaching Methods And Skills In The Content Areas	6
EDUC 298	Student Teaching Seminar	1
PSYCH 155	Educational Psychology	3
PSYCH 208	Psychological & Educational Development Of The Adolescent	3
PSYCH 354	Psychology Of The Exceptional Child	3
Clinical Experience: 16 semester hours		
EDUC 104	Teacher Field Experience	2
EDUC 164	Aiding Elementary, Middle And Secondary Schools	2
EDUC 299	Student Teaching	12
Psychology Degree Requirements: 17 semester hours		
PSYCH 10	Introduction to Psychology	1
PSYCH 140	Research Methods	4
PSYCH 240	Theories Of Learning	3
PSYCH 250	Developmental Psychology	3
PSYCH 362	Abnormal Psychology	3
or PSYCH 360	Personality Theory	
PSYCH 308	Social Psychology	3
Certification: 17 semester hours		
9 hours of American History		
HISTORY 341	Colonial America	
HISTORY 342	Revolutionary America, 1754-1789	
HISTORY 343	Age Of Jefferson And Jackson	
HISTORY 344	Civil War And Reconstruction	
HISTORY 347	Course HISTORY 347 Not Found	
HISTORY 348	Recent United States History	
HISTORY 351	Course HISTORY 351 Not Found	
HISTORY 353	History Of The Old South	
HISTORY 354	History Of The Modern South	
HISTORY 355	Course HISTORY 355 Not Found	
HISTORY 357	History of the American West	
HISTORY 358	Course HISTORY 358 Not Found	
HISTORY 360	Course HISTORY 360 Not Found	
HISTORY 370	History Of Baseball	
HISTORY 380	20Th Century Americans In Combat	
HISTORY 382	The United States in Vietnam	
HISTORY 383	U.S. Diplomatic History to World War II	
HISTORY 385	Course HISTORY 385 Not Found	
8 hours of World History		
HISTORY 111	Early Western Civilization	
HISTORY 112	Modern Western Civilization	
HISTORY 220	Making Of Modern Britain	
HISTORY 222	The Making Of Modern France	
HISTORY 224	Making Of Modern Russia	
HISTORY 225	European Diplomatic History 1814 - Present	
HISTORY 226	Modern East Asia	
HISTORY 321	Ancient Greece	

HISTORY 323	Medieval History I
HISTORY 324	Medieval History II
HISTORY 325	History Of Renaissance Thought
HISTORY 327	Europe In The Age Of The French Revolution And Napoleon
HISTORY 328	Foundations Of Contemporary Europe 1815-1914
HISTORY 329	Contemporary Europe

Justification for request Need to remove the History courses that are no longer active.

Supporting Documents

Course Reviewer Comments

Key: 193

Course Inventory Change Request

New Experimental Course Proposal

Date Submitted: 10/21/13 4:17 pm

Viewing: **ART 201.TBD : Topics in Visual Culture and Aesthetics**

File: 3990

Last edit: 12/05/13 9:22 am

Changes proposed by: ivliyeva

Requested	Spring 2014
Effective Change Date	
Department	Arts, Languages, & Philosophy
Discipline	Art (ART)
Course Number	201
Topic ID	TBD
Title	Topics in Visual Culture and Aesthetics
Abbreviated Course Title	Visual Culture/Aesthetic
Instructors	Andrew M. Tohline

Catalog Description
An exploration of contemporary visual culture and aesthetics topics, including inquiries into the role of technology and copyright in art and media, representations of gender and identity in advertising and art, questions of taste, and the constantly-shifting definition of art. An art and philosophy class for people who like ideas and the occasional movie.

Prerequisites
None.

Field Trip Statement

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

Justification for new course:
Department requested.

Semester(s) previously taught

Co-Listed Courses:
PHILOS 201 - Special Topics

Course Reviewer Comments

In Workflow

1. RPHILOS Chair
2. CCC Secretary
3. Arts & Humanities DSCC Chair
4. CCC Meeting Agenda
5. Campus Curricula Committee Chair
6. Registrar
7. Peoplesoft

Approval Path

1. 12/03/13 12:12 pm
lance: Approved for RPHILOS Chair
2. 12/05/13 9:22 am
lance: Approved for CCC Secretary
3. 12/05/13 9:36 am
ivliyeva: Approved for Arts & Humanities DSCC Chair

Key: 3990

Course Inventory Change Request

New Experimental Course Proposal

Date Submitted: 08/29/13 4:25 pm

Viewing: **CHEM 301.TBD : Organometallics**

File: 4006

Last edit: 12/12/13 2:25 pm

Changes proposed by: pericles

Requested	Spring 2014
Effective Change Date	
Department	Chemistry
Discipline	Chemistry (CHEM)
Course Number	301
Topic ID	TBD
Title	Organometallics
Abbreviated Course Title	Organometallics
Instructors	Pericles Stavropoulos

Catalog Description	The course concentrates on the use of transition metals in organic synthesis, with particular emphasis on catalytic reactions and issues of stereoselectivity.				
Prerequisites	Chem 232				
Field Trip Statement					
Credit Hours	LEC: 3	LAB: 0	IND: 0	RSD: 0	Total: 3

Justification for new course:	The course will discuss aspects of Inorganic/Organic Chemistry which are vital to the synthetic chemist and can only be tangentially covered in other inorganic or organic chemistry courses.
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Semester(s) previously taught	none
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Co-Listed Courses:	
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Course Reviewer Comments	
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In Workflow

1. **RCHEMIST Chair**
2. **CCC Secretary**
3. **Sciences DSCC Chair**
4. **CCC Meeting Agenda**
5. Campus Curricula Committee Chair
6. FS Meeting Agenda
7. Faculty Senate Chair
8. Registrar
9. Peoplesoft

Approval Path

1. 11/20/13 2:27 pm
woelkk: Approved for RCHEMIST Chair
2. 11/21/13 10:58 am
lahne: Approved for CCC Secretary
3. 12/06/13 12:49 pm
tauritzd:
Approved for Sciences DSCC Chair

Key: 4006

Course Inventory Change Request

New Experimental Course Proposal

Date Submitted: 11/01/13 2:34 pm

Viewing: **BIO SCI 301.TBD : Experimental Research Design**

File: 4013

Last edit: 12/13/13 8:23 am

Changes proposed by: shannonk

Requested	Summer 2014
Effective Change Date	
Department	Biological Sciences
Discipline	Biological Sciences (BIO SCI)
Course Number	301
Topic ID	TBD
Title	Experimental Research Design
Abbreviated Course Title	Research Design
Instructors	staff

Catalog Description	The course is designed to develop students' abilities to design, execute and communicate research projects. Students will be introduced to the advantages and limitations of different model organisms and experimental systems. The course will address problems in formulating hypotheses, conducting and analyzing research, and critically evaluating results.				
Prerequisites	BIO SCI 110 or 111				
Field Trip Statement					
Credit Hours	LEC: 1	LAB: 2	IND: 0	RSD: 0	Total: 3

Justification for new course:	Will provide structured environment for summer undergraduate research, with students receiving formalized instruction in research design, and opportunities to share research struggles and successes with professors and fellow students.
Semester(s) previously taught	
Co-Listed Courses:	

Course Reviewer Comments	lahne (11/01/13 2:32 pm): Rollback: Campus will still be using 3-digit numbers in Summer 2014. Please resubmit using 3-digit course numbers for the course and prerequisite courses. lahne (11/21/13 10:55 am): Rollback: Please edit the credit hours.
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In Workflow

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

Approval Path

1. 11/01/13 2:36 pm
aronstam:
Approved for
RBIOLSCI Chair
2. 11/21/13 10:55 am
lahne: Rollback to
RBIOLSCI Chair
for CCC Secretary
3. 11/21/13 12:15 pm
aronstam:
Approved for
RBIOLSCI Chair
4. 11/21/13 12:29 pm
lahne: Approved
for CCC Secretary
5. 12/06/13 12:48 pm
tauritzd:
Approved for
Sciences DSCC
Chair

Key: 4013

Course Inventory Change Request

New Experimental Course Proposal

Date Submitted: 10/21/13 4:16 pm

Viewing: **ART 201.TBD : Exploring Digital Art**

File: 4014

Last edit: 10/21/13 4:16 pm

Changes proposed by: ivliyeva

Requested	Spring 2014
Effective Change Date	
Department	Arts, Languages, & Philosophy
Discipline	Art (ART)
Course Number	201
Topic ID	TBD
Title	Exploring Digital Art
Abbreviated Course Title	Exploring Digital Art
Instructors	Lucille Myers

Catalog Description
This course is an exploration of digital art as a medium for making art as well as understanding visual culture from the past, present, and ideas for the future. A multidisciplinary approach will combine digital arts, design thinking, and humanities in a creative and scholarly atmosphere.

Prerequisites None

Field Trip Statement

Credit Hours LEC: 1.5 LAB: 1.5 IND: 0 RSD: 0 Total: 3

Justification for new course: None

Semester(s) previously taught

Co-Listed Courses:

Course Reviewer Comments

In Workflow

1. **RPHILOSO Chair**
2. **CCC Secretary**
3. **Arts & Humanities DSCC Chair**
4. **CCC Meeting Agenda**
5. Campus Curricula Committee Chair
6. Registrar
7. Peoplesoft

Approval Path

1. 12/03/13 12:12 pm
lance: Approved for RPHILOSO Chair
2. 12/05/13 9:23 am
lahne: Approved for CCC Secretary
3. 12/05/13 9:36 am
ivliyeva: Approved for Arts & Humanities DSCC Chair

Key: 4014

Course Inventory Change Request

New Experimental Course Proposal

Date Submitted: 10/29/13 2:14 pm

Viewing: **BIO SCI 201.TBD : Cave Biology**

File: 4015

Last edit: 12/13/13 8:35 am

Changes proposed by: shannonk

Requested	Summer 2014
Effective Change Date	
Department	Biological Sciences
Discipline	Biological Sciences (BIO SCI)
Course Number	201
Topic ID	TBD
Title	Cave Biology
Abbreviated Course Title	Cave Biology
Instructors	staff

Catalog Description	In Cave Biology we will study cave organisms and cave ecosystems. We will cover such topics as growth of speleothems, caves as a natural laboratory, behavior of cave animals, and regressive characteristics of cave species. We will investigate the relationship between Karst topography (caves, springs, sinkholes) and underground water contamination.
Prerequisites	Any geology, environmental engineering, or biology class except Bio Sci 102
Field Trip Statement	This is a one week class meeting each day from 9-5. Trips will be arranged to local caves, there is no cost.
Credit Hours	LEC: 1 LAB: 1 IND: 0 RSD: 0 Total: 2

Justification for new course:	Cave Biology is an opportunity for students to learn about an important natural feature of Missouri's ecology
Semester(s) previously taught	Summer 2013
Co-Listed Courses:	

Course Reviewer
Comments

In Workflow

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

Approval Path

1. 10/29/13 2:50 pm
aronstam:
Approved for
RBIOLSCI Chair
2. 11/01/13 2:30 pm
lahne: Approved
for CCC Secretary
3. 12/06/13 12:42 pm
tauritzd:
Approved for
Sciences DSCC
Chair

Key: 4015

Course Inventory Change Request

New Experimental Course Proposal

Date Submitted: 11/10/13 5:22 pm

Viewing: **BIO SCI 301.TBD : Biology of Aging**

File: 4017

Last edit: 12/13/13 8:19 am

Changes proposed by: houch

Requested	Fall 2014
Effective Change Date	
Department	Biological Sciences
Discipline	Biological Sciences (BIO SCI)
Course Number	301
Topic ID	TBD
Title	Biology of Aging
Abbreviated Course Title	Biology of Aging
Instructors	Chen Hou

Catalog Description
 We will discuss the proximate and ultimate mechanisms of aging, and review a few leading theories of aging with the emphases on oxidative stress and life history tradeoffs. We will take the comparative approach to study aging across species, and the interventions that extend animals' lifespan, and explore why they may or may not work on humans.

Prerequisites
 Bio Sci 211 Cell Biology

Field Trip Statement

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

Justification for new course:
 Requested by students

Semester(s) previously taught
 N/A

Co-Listed Courses:

Course Reviewer Comments

In Workflow

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

Approval Path

1. 11/10/13 7:20 pm aronstam: Approved for RBIOLSCI Chair
2. 11/21/13 10:54 am lahne: Approved for CCC Secretary
3. 12/06/13 12:45 pm tauritzd: Approved for Sciences DSCC Chair

Key: 4017

Course Inventory Change Request

New Experimental Course Proposal

Date Submitted: 12/05/13 9:20 am

Viewing: **CHEM 401.TBD : Neurochemistry with Clinical Correlations**

File: 4019

Last edit: 12/13/13 4:18 pm

Changes proposed by: lahne

Requested	Spring 2014
Effective Change Date	
Department	Chemistry
Discipline	Chemistry (CHEM)
Course Number	401
Topic ID	TBD
Title	Neurochemistry with Clinical Correlations
Abbreviated Course Title	Neurochemistry
Instructors	Drs. Daniel Hier and Nuran Ercal

Catalog Description This course introduces the neurochemistry of how neurons maintain membrane potentials, transmit signals and summate input signals to compute output signals. It includes clinical correlations that demonstrate how insights from neurochemistry have furthered our understanding of neurological diseases such as epilepsy, Parkinson's disease, Alzheimer's, and more.

Prerequisites Chem 361

Field Trip Statement N/A

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

Justification for new course: There are mainly two reasons to offer this course: 1) Several faculty member's research area is focused on an understanding of neurodegenerative disorders. 2) There has been a rise in neurodegenerative disorders (Alzheimer's, Parkinson's, and other types of dementia) as human beings live longer. There is no cure for these disorders yet and drug discoveries are historically accomplished by chemists. We believe there is a need for our students to have an early understanding of the chemical pathology of neurological disorders.

Semester(s) previously taught N/A

Co-Listed Courses:

Course Reviewer **lahne (11/14/13 3:31 pm):** Rollback: please approve
 Comments **lahne (12/05/13 12:18 pm):** Rollback: correct workflow

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. Registrar
8. Peoplesoft

Approval Path

1. 12/05/13 12:15 pm
woelkk: Approved for RCHEMIST Chair
2. 12/05/13 12:16 pm
lahne: Approved for CCC Secretary
3. 12/05/13 12:18 pm
lahne: Rollback to CCC Secretary for Pending CCC Agenda post
4. 12/05/13 12:18 pm
lahne: Approved for CCC Secretary
5. 12/13/13 4:18 pm
tauritzd: Approved for Sciences DSCC Chair

Key: 4019

Course Inventory Change Request

New Experimental Course Proposal

Date Submitted: 11/20/13 9:41 am

Viewing: **CHEM 301.TBD : Fundamentals of Mass Spectrometer Design and Fabrication**

File: 4020

Last edit: 12/06/13 12:55 pm

Changes proposed by: lahne

Requested Spring 2014

Effective Change
Date

Department Chemistry

Discipline Chemistry (CHEM)

Course Number 301

Topic ID TBD

Title Fundamentals of Mass Spectrometer Design and Fabrication

Abbreviated Course Title MS Design & Fabrication

Instructors Shubhender Kapila

Catalog Description The aim of the course is to provide an understanding of ion optics, optimization of ion optics through simulation software and incorporation of the optimized optics in the design and fabrication of compact functional mass spectrometers in a lecture lab format.

Prerequisites Chem 251

Field Trip
Statement

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

Justification for new course: department request

Semester(s) previously taught

Co-Listed Courses:

Course Reviewer

Comments

In Workflow

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

Approval Path

1. 11/20/13 2:28 pm
woelkk: Approved for RCHEMIST Chair
2. 11/21/13 11:00 am
lahne: Approved for CCC Secretary
3. 12/06/13 12:55 pm
tauritzd: Approved for Sciences DSCC Chair

Key: 4020

Course Inventory Change Request

New Experimental Course Proposal

Date Submitted: 11/19/13 3:59 pm

Viewing: **STAT 6001.TBD : Statistical Shape Analysis**

File: 4021

Last edit: 11/19/13 3:59 pm

Changes proposed by: imorgan

Requested	Fall 2014
Effective Change Date	
Department	Mathematics & Statistics
Discipline	Statistics (STAT)
Course Number	6001
Topic ID	TBD
Title	Statistical Shape Analysis
Abbreviated Course Title	Stat Shape Analysis
Instructors	Robert L. Paige
Catalog Description	Statistical shape analysis considers random objects where location, rotation and scale information is removed. This is a new area of statistics that has a huge variety of novel applications in many areas of science including agriculture, archeology, bioinformatics, biology, computer science, engineering, genetics, geography, geology and medicine.
Prerequisites	Math 22 and one of Stat 211, 213, 215, 217 or 343
Field Trip Statement	
Credit Hours	LEC: 3.0 LAB: 0.0 IND: 0.0 RSD: 0.0 Total: 3.0

Justification for new course: This is a novel area of statistics which is very interdisciplinary and should be of interest to students in a variety of STEM fields.

Semester(s) previously taught: None

Co-Listed Courses:

Course Reviewer Comments

In Workflow

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

Approval Path

1. 11/19/13 4:14 pm
sclark: Approved for RMATHEMA Chair
2. 12/05/13 9:25 am
lahne: Approved for CCC Secretary
3. 12/13/13 4:20 pm
tauritzd: Approved for Sciences DSCC Chair

Key: 4021

Course Inventory Change Request

New Experimental Course Proposal

Date Submitted: 11/21/13 11:28 am

Viewing: **NUC ENG 401.TBD : Nuclear Reactor Passive Safety**

File: 4024

Last edit: 12/05/13 9:24 am

Changes proposed by: usmans

Requested	Spring 2014
Effective Change Date	
Department	Mining & Nuclear Engineering
Discipline	Nuclear Engineering (NUC ENG)
Course Number	401
Topic ID	TBD
Title	Nuclear Reactor Passive Safety
Abbreviated Course Title	Nuclear Reactor Passive
Instructors	Shoaib Usman

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
8. Peoplesoft

Approval Path

1. 11/21/13 11:58 am
frimpong: Approved for RMINNUCL Chair
2. 12/05/13 9:25 am
lahne: Approved for CCC Secretary
3. 12/16/13 2:55 pm
sraprer: Approved for Engineering DSCC Chair
4. 12/16/13 3:00 pm
lahne: Approved for Pending CCC Agenda post

Catalog Description	Overview of passive safety covering 2 parts; neutronics safety and the thermo fluid safety. Thermo fluid safety rely on natural forces; gravity, natural circulation, and phase change alone to keep the core at an acceptable temperatures. For neutronic safety, core is designed to produce sufficient negative reactivity to shut down the fission chain reaction.				
Prerequisites	Graduate Standing, NUC ENG 221, NUC ENG 223 and NUC ENG 303				
Field Trip Statement					
Credit Hours	LEC: 3	LAB: 0	IND: 0	RSD: 0	Total: 3

Justification for new course: There is no course being offered in this area and passive safety is increasingly important area in new reactor designs.

Semester(s) previously taught

Co-Listed Courses:

Course Reviewer Comments

Key: 4024

Course Inventory Change Request

New Experimental Course Proposal

Date Submitted: 12/03/13 9:26 am

Viewing: **IS&T 6001.TBD : Information Visualization and Analytics**

File: 4025

Last edit: 12/03/13 9:26 am

Changes proposed by: barryf

Requested	Fall 2014
Effective Change Date	
Department	Business and Information Technology
Discipline	Info Science & Technology (IS&T)
Course Number	6001
Topic ID	TBD
Title	Information Visualization and Analytics
Abbreviated Course Title	Info Visualization/Anal.
Instructors	Dr. Michael Hilgers

Catalog Description
Develops models of modern information systems using combinatorial constructs to analyze and visualize the underlying structure and related growth dynamics. Potential information models include the massive graph structure of the World Wide Web, clustering in social media, random graphs models of web dynamics, & information flow across random networks.

Prerequisites
Statistics and calculus knowledge

Field Trip Statement

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

Justification for new course:
Continued development of big data courses.

Semester(s) previously taught

Co-Listed Courses:

Course Reviewer Comments

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. Registrar
8. Peoplesoft

Approval Path

1. 12/04/13 12:35 am
siauk: Approved for RBUSADMN Chair
2. 12/05/13 9:23 am
lahne: Approved for CCC Secretary
3. 12/05/13 11:49 am
barryf: Approved for Social Sciences DSCC Chair
4. 12/12/13 2:26 pm
lahne: Approved for Pending CCC Agenda post

Key: 4025

Course Inventory Change Request

New Experimental Course Proposal

Date Submitted: 11/22/13 2:16 pm

Viewing: **ART 201.TBD : Study of Documentary**

File: 4026

Last edit: 11/22/13 2:16 pm

Changes proposed by: denises

Requested	Fall 2014
Effective Change Date	
Department	Arts, Languages, & Philosophy
Discipline	Art (ART)
Course Number	201
Topic ID	TBD
Title	Study of Documentary
Abbreviated Course Title	Study of Documentary
Instructors	Andrew Max Tohline

Catalog Description
An exploration of the art, truth, and controversy of the documentary from 1895 to the present, featuring landmark films seen through contemporary and historical perspectives: actualities, city symphonies, war documentaries, concert films, personal documentaries, and mockumentaries.

Prerequisites
Art 85

Field Trip Statement

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

Justification for new course:
Need 200 level course to support Literature and Film minor.

Semester(s) previously taught
N/A

Co-Listed Courses:

Course Reviewer Comments

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. Registrar
8. Peoplesoft

Approval Path

1. 12/03/13 12:12 pm
lahne: Approved for RPHILOSO Chair
2. 12/05/13 9:23 am
lahne: Approved for CCC Secretary
3. 12/05/13 9:37 am
ivliyeva: Approved for Arts & Humanities DSCC Chair
4. 12/12/13 2:26 pm
lahne: Approved for Pending CCC Agenda post

Key: 4026

Course Inventory Change Request

New Experimental Course Proposal

Date Submitted: 12/09/13 1:40 pm

Viewing: **CHEM 401.TBD : Molecular Reaction Dynamics**

File: 4028

Last edit: 12/13/13 4:25 pm

Changes proposed by: dawesr

Requested	Spring 2014
Effective Change Date	
Department	Chemistry
Discipline	Chemistry (CHEM)
Course Number	401
Topic ID	TBD
Title	Molecular Reaction Dynamics
Abbreviated Course Title	Mol. Reac. Dynamics
Instructors	Richard Dawes

Catalog Description	The course will cover several aspects of molecular reaction dynamics. Topics will include collisions, scattering, potential energy surfaces, spectroscopic techniques, molecular energy transfer, and photodissociation.
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Prerequisites	Chem 243 and Chem 343
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Field Trip Statement	none
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Credit Hours	LEC: 3	LAB: 0	IND: 0	RSD: 0	Total: 3
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Justification for new course:	We have a number of interested graduate students who need a course like this and are prepared to sign up. No currently listed course is similar enough in description to justify covering the desired material.
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Semester(s) previously taught	none
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Co-Listed Courses:	
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Course Reviewer Comments	
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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. Registrar
8. Peoplesoft

Approval Path

1. 12/09/13 1:42 pm
woelkk: Approved for RCHEMIST Chair
2. 12/09/13 1:48 pm
lahne: Approved for CCC Secretary
3. 12/13/13 4:26 pm
tauritzd: Approved for Sciences DSCC Chair

Key: 4028

Program Change Request

Date Submitted: 09/13/13 12:24 pm

Viewing: **ENGL-BA : English BA**

File: 48.1

Last edit: 11/07/13 1:30 pm

Changes proposed by: kswenson

Catalog Pages	English
Using this Program	
Start Term	Fall 2014
Program Code	ENGL-BA
Department	English and Technical Communication
Title	English BA

In Workflow

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

Approval Path

1. 09/13/13 12:29 pm
kswenson: Approved for RENGGLISH Chair
2. 09/30/13 1:43 pm
lahne: Approved for CCC Secretary
3. 09/30/13 2:29 pm
ivliyeva: Approved for Arts & Humanities DSCC Chair
4. 11/07/13 1:21 pm
lahne: Rollback to RENGGLISH Chair for CCC Meeting Agenda
5. 11/07/13 1:31 pm
kswenson: Approved for RENGGLISH Chair
6. 11/21/13 10:57 am
lahne: Approved for CCC Secretary
7. 11/21/13 11:00 am
ivliyeva: Approved for Arts & Humanities DSCC Chair

Program Requirements and Description

Bachelor of Arts English

The requirements for the English major are as follows:

1. ~~Prerequisites for the English major are ENGLISH 75, ENGLISH 80, ENGLISH 105, and ENGLISH 106. Prerequisites for the English major are ENGLISH 75, ENGLISH 80, ENGLISH 105, and ENGLISH 106. Six~~ Six of these hours will satisfy the General Education Humanities requirements ~~for the~~ for the Bachelor of Arts degree.
2. **ENGLISH 202 Critical Approaches to Literature.**
3. **Capstone course for major: ENGLISH 350 Texts and Contexts.**
4. **In addition to Fifteen hours of course work at the requirements above, fifteen hours of course work at the 2000 200 or 3000 300 level in departmental English and American literature, including two courses in English Literature; and two American Literature courses, twelve of which must be at the 3000 level or above. including literature for adolescents.**

~~Twenty-four hours of English course work at the 200 and 300 level, including ENGLISH 202 Critical Approaches To Literature and ENGLISH 350 Texts And Contexts. Of these twenty-four hours a minimum of fifteen hours must be at the 300 level. Only nine hours at the 200 level may count towards fulfilling the major requirements.~~ Students are strongly recommended to work closely with their advisors in planning their major curriculum.

Bachelor of Arts (Emphasis Area in Secondary Education)

The student will fulfill the general requirements for the Bachelor of Arts degree, *except for foreign language and a minor*; the requirements for the English major (*emphasis in secondary education*); and the requirements for Missouri certification in the teaching of English. See Education. Contact the Missouri S&T English Department for advising. Students who do not complete certification requirements must complete regular requirements (foreign language and a minor) in order to receive a B.A. Students preparing for Teacher Certification should note that the requirements for the English major are as follows:

1. **ENGLISH 75, ENGLISH 80, ENGLISH 105, ENGLISH 106.**
2. **ENGLISH 202 Critical Approaches to Literature.**
3. **Capstone course for major: ENGLISH 350 Texts and Contexts.**
4. **Fifteen hours of course work at the 2000 or 3000 level in English and American literature, including two courses in English Literature; and two American Literature courses, including literature for adolescents.**
5. ~~Fifteen hours of course work at the 200 or 300 level in English and American literature, including two courses in English Literature; and two American Literature courses, including literature for adolescents.~~ Six hours of linguistics.
6. **ENGLISH 202 Critical Approaches To Literature. Capstone course for major: ENGLISH 350.** Twelve hours of writing, including a course in the teaching of writing. Six of these hours will also be satisfied by the General Education Composition requirement for the B.A. degree; three of these hours will also be satisfied by the capstone course.
7. A minimum of fifteen hours must be at the **3000 level or above. 300 level.**

Justification request Updated in keeping with renumbering.

Supporting Documents

Course Reviewer Comments **lahne (11/07/13 1:21 pm):** Rollback: At the 10/30/2013 CCC meeting, committee member asked for clarification to the program description and requirements.

Key: 48

CC File # 8475-2013-Min Eng - 407-32

Effective Year: 2014 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 (Sections 1-9 must be completed. Leave "Proposed" items blank if no change is being made.)

1. Department: **Mining and Nuclear Engineering** *min eng 6632*

2. Discipline and Course Number: Present: ~~MinE 407~~ Proposed:

3. Course Title: Present: **Theory of High Explosives**

Proposed:

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

4. Catalog Description (360 character spaces or less.)

Present:

Proposed:

5. If course requires field trip check box:

6. Credit Hours: Present: Lecture **3.0** Lab **0** Total **3.0**

Proposed: Lecture Lab Total

7. Prerequisites:

Present: **Successful background check and Graduate Standing.** ~~(Co-listed with Exp Eng 407)~~

Proposed: **Graduate Standing.** ~~Co-listed with Exp Eng 407~~

8. Required for Majors: Elective for Majors:

9. Justification: **Background check not required for this class. No explosives will be handled**

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) *Exp Eng 407* 3) _____ 5) _____
- 2) *6212* 4) _____ 6) _____

Recommended by Department _____

(Chair signature)

Date: *06/06/13*

Recommended by DSCC _____

(Chair signature)

Date: *6/26/13*

Approved by Curricula Committee: _____

(Chair signature)

Date: _____

Approved by Faculty Senate: _____

(Chair signature)

Date: _____

Effective Year: 2013
Term: Summer Fall Spring

CC File # 8476-2013-Elon-350-10

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: Economics

2. Discipline and Course Number: Present :

Proposed: Econ 345 ~~350~~ 4643

3. Course Title: Present:

Proposed: Ethical Problems in a Global Environment

Abbreviated Course Title: Ethical Probs Global Env

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

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

Present:

Proposed: Focuses on the international dimension of ethics including corporate responsibility from economic, social, and environmental perspectives. It address the ethical challenges of decision making, stakeholder engagement, and governance at micro- (personal), meso- (org), and macro-levels (systems).

5. If course requires field trip check box:

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

Proposed: Lecture: 3 Lab: 0 Total: 3

7. Prerequisites:

Present:

Proposed: Senior or graduate standing.

8. Required for Majors: Elective for Majors:

9. Justification: Taught as BUS 301-International Ethical Problems in International Business, SS 12 (6 Distance and 15 in-class students)/ECON 301-Ethical Problems in a Global Environment, SS 13 (3 Distance and 13 in-class students). This course was also taught last summer as part of a study abroad experience in China is an elective for a minor (Global Sustainable Economics) and a graduate certificate.

10. Semesters

previously offered as an experimental course (101, 201, 301, 401): SS 12, SS 13

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

Greg Gilles
(Chair signature)

Date:

6/14/13

Recommended by Discipline Specific Curricula Committee

Greg Gilles
(Chair signature)

Date:

7/17/13

Approved by Curricula Committee:

(Chair signature)

Date:

Approved by Faculty Senate:

(Chair signature)

Date:

CC File # 8477-2013-Exp Eng-305-32

Effective Year: 2014 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 (Sections 1-9 must be completed. Leave "Proposed" items blank if no change is being made.)

1. Department: **Mining and Nuclear Engineering** *Exp Eng 5112*

2. Discipline and Course Number: Present: ~~Exp E 305~~ Proposed:

3. Course Title: Present: **Explosives Handling and Safety**
Proposed:

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

4. Catalog Description (360 character spaces or less.)

Present:

Proposed:

5. If course requires field trip check box:

6. Credit Hours: Present: Lecture *3.0* Lab *0* Total *3*

Proposed: Lecture Lab Total

7. Prerequisites:

Present: **Min Eng 151, Min Eng 307, Successful background check.** (~~Co-listed with Min Eng 305~~)

Proposed: ~~Co-listed with Min Eng 305~~ *Min Eng 307 5612*

8. Required for Majors: Elective for Majors:

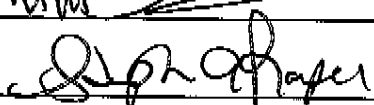
9. Justification: **Background check not required for this class. No explosives will be handled**

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) _____ 3) _____ 5) _____
- 2) _____ 4) _____ 6) _____

Recommended by Department:  Date: 06/06/13
(Chair signature)

Recommended by DSCC:  Date: 6/26/13
(Chair signature)

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

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

Effective Year: 2014 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 (Sections 1-9 must be completed. Leave "Proposed" items blank if no change is being made.)

1. Department: **Materials Science and Engineering**

2. Discipline and Course Number: Present: ^{MSE} ~~MSE 325~~ Proposed: ^{MSiE} 5517

3. Course Title: Present: **Materials Selection in Mechanical Design**
Proposed: **Integrated Computational Materials Engineering**

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

4. Catalog Description (360 character spaces or less.)

Present: **This course will introduce the basics of materials selection in mechanical design. It will also introduce the benefits of computational materials and process selection. The students will also learn to use a commercially available materials selection software.**

Proposed: **Introduction to different computational tools for studying materials at different length scales. Several atomistic, mesoscale and continuum models will be introduced and bridging between different modeling scales will be discussed. This course includes computer lab sessions to build models for solidification, solid state phase transformation, etc.**

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: ~~Met Eng 217, Met Eng 218~~ **Met Eng 121**

Proposed: ~~Met Eng 217, Math 204~~ **Met Eng 2120, Math 3304**

8. Required for Majors: Elective for Majors:

9. Justification:

10. Semesters previously offered as an experimental course (101, 201, 301, 401): **1**

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

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

Recommended by Department Wayne Hudson Date: 6/6/13

(Chair signature)

Recommended by DSCC Stephania Parker Date: 7-18-13

(Chair signature)

Approved by Curricula Committee: _____ Date: _____

(Chair signature)

Approved by Faculty Senate: _____ Date: _____

(Chair signature)

Effective Year: 2014
Term: Summer Fall Spring

CC File # 8479-2013-EnvEng-265-32

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: Civil, Arch., Env.
- 2. Discipline and Course Number: Present: EnvE ~~265~~ ^{NE 3615} Proposed:
- 3. Course Title: Present: Water And Wastewater Engineering
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: A study of the engineering design principles dealing with the quantity, quality and treatment of water, and the quantity, characteristics, treatment and disposal of wastewater.

Proposed:

- 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: Civ Eng 230 with grade of "C" or better, Civ Eng 261

Proposed: Civ Eng ~~261~~ 2601

- 8. Required for Majors: Elective for Majors:

9. Justification: Fluids and piping (CE 230 content) are not a significant portion of CE 265.

- 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) CE ~~265~~ ²⁶¹⁵ 2) 3)
- 4) 5)

Recommended by Department: [Signature]
(Chair signature)

Date: 5/15/13

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

Date: 5/25/13

Approved by Curricula Committee: _____
(Chair signature)

Date: _____

Approved by Faculty Senate: _____
(Chair signature)

Date: _____

(Revised 1/29/09)

Effective Year: 2014
Term: Summer Fall Spring

CC File # *8480-2013-Philos-*
254-10

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: Arts, Languages, and Philosophy
- 2. Discipline and Course Number: Present: Philosophy 203 Proposed: Philosophy ~~254~~ *3254*
- 3. Course Title: Present: Symbolic Logic in Argumentation
Proposed:

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

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

Present: An introduction to sentential and predicate logic with an emphasis on the latter. It will include metatheoretic discussions of both syntax and semantics with a focus on various techniques used to examine logical relationships within an artificial language.

Proposed:

5. If course requires field trip check box:

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

7. Prerequisites:
Present: None

Proposed: Any introductory (below 100) philosophy course. (~~Philosophy 15~~ is recommended.)

Philos 1115

8. Required for Majors: Elective for Majors:

9. Justification: Students in this course will: (1) acquire an understanding of an artificial language that is governed with mathematically precise rules, (2) learn many important logical concepts, including meta-theoretical ones, and (3) learn various methods of exposing logical relationships between sentences, including truth tables, models, and proofs. *11*

10. Semesters previously offered as an experimental course (101, 201, 301, 401): Spring 2012, Spring 2013 *16* *11*

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

1) _____ 2) _____ 3) _____

4) _____ 5) _____

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

Date: *4/27/2013*

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

Date: *6/27/20*

Approved by Curricula Committee: _____
(Chair signature)

Date: _____

Approved by Faculty Senate: _____
(Chair signature)

Date: _____