

MEMORANDUM TO: Ogden College of Science and Engineering Curriculum Committee

Dr. Jack Rudolph	Dr. James Gary	Dr. Keith Sylvester
Dr. Martin Stone	Dr. Zhonghang Xia	Dr. John Khouryieh
Dr. Bruce Schulte	Dr. Julie Ellis	Dr. Peter Hamburger
Dr. Scott Grubbs	Dr. Warren Campbell	Dr. Keith Andrew
Dr. Cathleen Webb	Dr. David Keeling	Dr. Attila Por
Dr. Hemali Rathnayake	Dr. Fred Siewers	Dr. Alex Barzilov
Dr. David Erbach		

FROM: Andrew Ernest, Chair

SUBJECT: Agenda for Thursday, April 5, 2012 3:45 p.m. in COHH 4123

A. OLD BUSINESS:

- I. Consideration of the minutes of the March 1, 2012, meeting.

B. NEW BUSINESS:

Consent Items

Department of Biology

1. Proposal to Suspend a Course
 - a. BIOL 150, Investigative Biotechnology, 5 hrs.
 - b. BIOL 151, Investigative Biotechnology Core II, 5 hrs.
 - c. BIOL 153, Investigative Biotechnology Module, 1 hr.
 - d. BIOL 415, Ecological Methods, 3 hrs.
2. Proposal to Revise Course Catalog Listing
 - a. BIOL 275, Colloquia, 1-3 hrs.
3. Proposal to Revise Course Prerequisites/Corequisites
 - a. BIOL 312, Bioinformatics, 3 hrs.
 - b. BIOL 348, Plant Taxonomy, 4 hrs.
 - c. BIOL 407, Virology, 3 hrs.
 - d. BIOL 490, Plants as Alternative Therapeutics, 3 hrs.
 - e. BIOL 495, Molecular Genetics, 3 hrs.
4. Proposal to Suspend a Program
 - a. Ref. #714, Investigative Biotechnology, 48 hrs.
 - b. Ref. #399, Minor, Investigative Biotechnology, 24 hrs.

Department of Chemistry

1. Proposal to Revise Course Catalog Listing
 - a. CHEM 451, Lab Physical Chemistry I, 2 hrs.
 - b. CHEM 452, Physical Chemistry II, 3 hrs.
 - c. CHEM 453, Lab Physical Chemistry II, 2 hrs.

Department of Mathematics and Computer Science

1. Proposal to Delete a Course
 - a. MATH 175, University Experience-Mathematics, 2 hrs.
 - b. CS 249, Consulting Practicum in Computer Science, 1-2 hrs.
 - c. CS 349, Consulting Practicum in Computer Science, 1-2 hrs.

2. Proposal to Reactivate a Suspended Course
 - a. CS 299, Introduction to Research in Computer Science, 3 hrs.
 - b. CS 406, Numerical Analysis II, 3 hrs.

Action Items

Department of Biology

1. Proposal to Make Multiple Revisions to a Course
 - a. BIOL 199, Introduction to Research Experience, 1 hr.

Department of Chemistry

1. Proposal to Make Multiple Revisions to a Course
 - a. CHEM 450, Physical Chemistry I, 3 hrs.

Information Items

Department of Physics and Astronomy

1. Proposal to Create a Temporary Course
 - a. PHYS 215, Learning Assistants for Physics Courses, 1 hr.

Department of Engineering

1. Proposal to Create a Temporary Course
 - a. ME333, Heat Transfer Laboratory, 1 hr.

C. OTHER BUSINESS

1. Ogden Undergraduate Curriculum Committee posting to Blackboard
2. CPE New Definition

MEMBERS PRESENT:

Dr. Jack Rudolph	Dr. Julie Ellis
Dr. Martin Stone	Dr. Fred Siewers
Dr. Scott Grubbs (proxy email vote)	Dr. John Khouryieh
Dr. Cathleen Webb	Dr. Peter Hamburger
Dr. Hemali Rathnayake	Dr. Keith Andrew
Dr. James Gary	Dr. Zhonghang Xia

Dr. Greg Arbuckle for Dr. Keith Sylvester
Dr. Mark Robinson for Dr. Attila Por

Visitor: Jana Fattic

FROM: Dr. Andrew Ernest, Chair

OLD BUSINESS:

Hamburger/Arbuckle moved approval of the minutes from the February 2, 2012 meeting.
Motion passed

NEW BUSINESS:

Consent Items

Consent agenda was accepted as presented.

Action Items

Department of Architectural and Manufacturing Sciences

Ellis/Hamburger moved approved of the proposal to revise a program, Ref. #575, Technology Management. Motion passed.

Department of Chemistry

Hamburger/Arbuckle moved approval of the proposals to revise course credit hours, CHEM 120, College Chemistry and CHEM 121, College Chemistry I Lab as one item.
Motion passed.

OTHER BUSINESS

Dr. Ernest reminded the departments that the proponent or other department representative should be present when a proposal is before the UCC

Dr. Ernest also presented the possibility of conducting OCSE Curriculum Committee business via blackboard when it is a short agenda and there are not contentious items for review.

Dr. Webb expressed concern to the committee regarding the movement of SITE evaluations to an online process. The committee agreed that Dr. Webb should draft a letter of support of continuing the paper SITE evaluations and non-support of the movement to on-line SITE evaluations. Dr. Webb will draft the letter and send out to the OCSE Curriculum Committee for comments/suggestions.

Hamburger/Ellis moved to adjourn at 4:22 p.m.

Proposal Date: 6 March 2012

**Ogden College of Science and Engineering
Department of Biology
Proposal to Suspend a Course
(Consent Item)**

Contact Person: Scott Grubbs, scott.grubbs@wku.edu, 745-5048

1. Identification of course:

- 1.1 Current course prefix (subject area) and number: BIOL 150
- 1.2 Course title: Investigative Biotechnology Core I
- 1.3 Credit hours: 5

2. Rationale for the course suspension: The Investigative Biotechnology (IB; Reference Number 714) major was launched during the 2007-2008 AY. The IB major was essentially a reworking of the former Recombinant Genetics major in an attempt to stimulate interest in this academic program. BIOL 150 is a first-semester course required for all IB majors that was designed and offered as a series of five, three-week modules. The number of IB majors, however, has remained very low since its inception, and as a consequence, enrollment in BIOL 150 has only been nine (Fall 2007), eleven (Fall 2008) and six (Fall 2009) students. Beginning with the 2010-2011 AY the Biology Department stopped offering BIOL 150 and has no immediate plans to reoffer this course.

3. Effect of course suspension on programs or other departments, if known: The only program affected will be the Investigative Biotechnology major, which is simultaneously being suspended. This course is not required for any non-Biology academic program across the university.

4. Proposed term for implementation: Fall 2012

5. Dates of prior committee approvals:

Department of Biology:	March 30, 2012
OCSE Curriculum Committee:	_____
Undergraduate Curriculum Committee:	_____
University Senate:	_____

Attachment: Course Inventory Form

Proposal Date: 6 March 2012

**Ogden College of Science and Engineering
Department of Biology
Proposal to Suspend a Course
(Consent Item)**

Contact Person: Scott Grubbs, scott.grubbs@wku.edu, 745-5048

1. Identification of course:

- 1.1 Current course prefix (subject area) and number: BIOL 151
- 1.2 Course title: Investigative Biotechnology Core II
- 1.3 Credit hours: 5

2. Rationale for the course suspension: The Investigative Biotechnology (IB; Reference Number 714) major was launched during the 2007-2008 AY. The IB major was essentially a reworking of the former Recombinant Genetics major in an attempt to stimulate interest in this academic program. BIOL 151 is a second-semester course required for all IB majors that was designed and offered as a series of five, three-week modules. The number of IB majors, however, has remained very low since its inception, and as a consequence, enrollment in BIOL 151 has only been nine (Fall 2007), six (Fall 2008) and five (Fall 2009) students. Beginning with the 2010-2011 AY the Biology Department stopped offering BIOL 151 and has no immediate plans to reoffer this course.

3. Effect of course suspension on programs or other departments, if known: The only program affected will be the Investigative Biotechnology major, which is simultaneously being suspended. This course is not required for any non-Biology academic program across the university.

4. Proposed term for implementation: Fall 2012

5. Dates of prior committee approvals:

Department of Biology:	March 30, 2012
OCSE Curriculum Committee:	_____
Undergraduate Curriculum Committee:	_____
University Senate:	_____

Attachment: Course Inventory Form

Proposal Date: 6 March 2012

**Ogden College of Science and Engineering
Department of Biology
Proposal to Suspend a Course
(Consent Item)**

Contact Person: Scott Grubbs, scott.grubbs@wku.edu, 745-5048

1. Identification of course:

- 1.1 Current course prefix (subject area) and number: BIOL 153
- 1.2 Course title: Investigative Biotechnology Module
- 1.3 Credit hours: 1

2. Rationale for the course suspension: The Investigative Biotechnology (IB; Reference Number 714) major was launched during the 2007-2008 AY. The IB major was essentially a reworking of the former Recombinant Genetic Technology major in an attempt to stimulate interest in this academic program. BIOL 153 is taught as individual, one-credit modules that correspond to the three-week units in BIOL 150 and BIOL 151. Because both BIOL 150 and BIOL 151 are being suspended, by default, BIOL 153 will simultaneously go into a suspended status.

3. Effect of course suspension on programs or other departments, known: The only program affected will be the Investigative Biotechnology major, which is simultaneously being suspended. This course is not required for any non-Biology academic program across the university

4. Proposed term for implementation: Fall 2012

5. Dates of prior committee approvals:

Department of Biology:	March 30, 2012
OCSE Curriculum Committee:	_____
Undergraduate Curriculum Committee:	_____
University Senate:	_____

Attachment: Course Inventory Form

Proposal Date: 6 March 2012

**Ogden College of Science and Engineering
Department of Biology
Proposal to Suspend a Course
(Consent Item)**

Contact Person: Scott Grubbs, scott.grubbs@wku.edu, 745-5048

1. Identification of course:

- 1.1 Current course prefix (subject area) and number: BIOL 415
- 1.2 Course title: Ecological Methods
- 1.3 Credit hours: 3

2. Rationale for the course suspension: The Department of Biology has not offered BIOL 415 since the fall 2006 semester. This course is not a required element for any of the biology majors. We do not anticipate developing a program that will include or require this course.

3. Effect of course suspension on programs or other departments, if known:
None. This course is not required for any academic program across the university.

4. Proposed term for implementation: Fall 2012

5. Dates of prior committee approvals:

Department of Biology:	March 30, 2012
OCSE Curriculum Committee:	_____
Undergraduate Curriculum Committee:	_____
University Senate:	_____

Attachment: Course Inventory Form

Proposal Date: 6 March 2012

**Ogden College of Science and Engineering
Department of Biology
Proposal to Revise Course Catalog Listing
(Consent Item)**

Contact Person: Scott Grubbs, scott.grubbs@wku.edu, 745-5048

1. Identification of course:

- 1.1 Course prefix (subject area) and number: BIOL 275
- 1.2 Course title: Colloquia
- 1.3 Credit hours: 1-3

2. Current course catalog listing: Issues of contemporary, historical or intellectual significance in Biology, often with ethical implications will be weighed and debated. May not be used to satisfy the general education requirement in natural sciences. May be repeated with a maximum of (3) counting for the Biology or Investigative Biotechnology major.

3. Proposed course catalog listing: Issues of contemporary, historical or intellectual significance in Biology, often with ethical implications will be weighed and debated. May not be used to satisfy the general education requirement in natural sciences. May be repeated with a maximum of (3) hours counting towards the Biology major or minor.

4. Rationale for revision of the course catalog listing: Because the Investigative Biotechnology major will go into suspended status, the latter portion of the catalog listing is no longer valid. The Biology Department also wishes to make this course available to a student minoring in Biology.

5. Proposed term for implementation: Fall 2012

6. Dates of prior committee approvals:

Department of Biology:	March 30, 2012
OCSE Curriculum Committee:	_____
Undergraduate Curriculum Committee:	_____
University Senate:	_____

Attachment: Course Inventory Form

Proposal Date: 6 March 2012

**Ogden College of Science and Engineering
Department of Biology
Proposal to Revise Course Prerequisites/Corequisites
(Consent Item)**

Contact Person: Scott Grubbs, scott.grubbs@wku.edu, 745-5048

1. Identification of course:

- 1.1 Course prefix (subject area) and number: BIOL 312
- 1.2 Course title: Bioinformatics
- 1.3 Credit hours: 3

2. Current prerequisites/corequisites/special requirements: BIOL 150 or 120-121 or 113, and BIOL 283 or MATH 183 or MATH 382 or STAT 301

3. Proposed prerequisites/corequisites/special requirements: BIOL 120-121 or 113, and BIOL 283 or MATH 183 or MATH 382 or STAT 301

4. Rationale for the revision of prerequisites/corequisites/special requirements: With BIOL 150 (Investigative Biotechnology Core I) moving to suspended status, this course will no longer be available as a prerequisite for BIOL 312.

5. Effect on completion of major/minor sequence: None

6. Proposed term for implementation: Fall 2012

7. Dates of prior committee approvals:

Department of Biology: March 30, 2012

Ogden College Curriculum Committee: _____

Undergraduate Curriculum Committee: _____

University Senate: _____

Attachment: Course Inventory Form

Proposal Date: 12 March 2012

**Ogden College of Science & Engineering
Department of Biology
Proposal to Revise Course Prerequisites/Corequisites
(Consent Item)**

Contact Person: Larry Alice, lawrence.alice@wku.edu, 745-7029

1. Identification of course:

- 1.1 Course prefix (subject area) and number: BIOL 348
- 1.2 Course title: Plant Taxonomy
- 1.3 Credit hours: 4

2. Current prerequisites/special:

BIOL 120/121 and BIOL 122/123, or consent of instructor

3. Proposed prerequisites/special requirements:

BIOL 222/223 with grade of C or better; or permission of instructor

4. Rationale for the revision of prerequisites/special requirements:

During the past six years, about 60% of students enrolled in BIOL 348 have taken BIOL 222/223 (Plant Biology & Diversity). BIOL 222/223 is a full-semester lecture/lab course covering the biology, evolution and taxonomy of the major plant groups. The remaining 40% of students obtain only a small portion of this content taught in BIOL 122/123 (Biological Concepts: Evolution, Diversity, and Ecology), with a maximum of four hours lecture time and a single two-hour laboratory exercise. Consequently, the students who have not taken BIOL 222/223 are not suitably prepared. This creates a large divergence among students in their foundational knowledge of plants, with too much time spent teaching content that is covered in BIOL 222/223.

5. Effect on completion of major/minor sequence: None

6. Proposed term for implementation: Fall 2012

7. Dates of prior committee approvals:

Biology Department: March 30, 2012

OCSE Curriculum Committee: _____

Undergraduate Curriculum Committee: _____

University Senate: _____

Attachment: Course Inventory Form

Proposal Date: 6 March 2012

**Ogden College of Science and Engineering
Department of Biology
Proposal to Revise Course Prerequisites/Corequisites
(Consent Item)**

Contact Person: Scott Grubbs, scott.grubbs@wku.edu, 745-5048

- 1. Identification of course:**
 - 1.1 Course prefix (subject area) and number: BIOL 407
 - 1.2 Course title: Virology
 - 1.3 Credit hours:3

- 2. Current prerequisites/corequisites/special requirements:** BIOL 150 or BIOL 319 and 322

- 3. Proposed prerequisites/corequisites/special requirements:** BIOL 319 and 322

- 4. Rationale for the revision of prerequisites/corequisites/special requirements:** With BIOL 150 (Investigative Biotechnology Core I) moving to suspended status, this course will no longer be available as a prerequisite for BIOL 312.

- 5. Effect on completion of major/minor sequence:** None

- 6. Proposed term for implementation:** Fall 2012

- 7. Dates of prior committee approvals:**

Department of Biology:	March 30, 2012
Ogden College Curriculum Committee:	_____
Undergraduate Curriculum Committee:	_____
University Senate:	_____

Attachment: Course Inventory Form

Proposal Date: 6 March 2012

**Ogden College of Science and Engineering
Department of Biology
Proposal to Revise Course Prerequisites/Corequisites
(Consent Item)**

Contact Person: Scott Grubbs, scott.grubbs@wku.edu, 745-5048

1. Identification of course:

- 1.1 Course prefix (subject area) and number: BIOL 490
- 1.2 Course title: Plants as Alternative Therapeutics
- 1.3 Credit hours: 3

2. Current prerequisites/corequisites/special requirements: BIOL 120-121 and BIOL 122-123, or BIOL 150 and BIOL 151

3. Proposed prerequisites/corequisites/special requirements: BIOL 120-121 and BIOL 122-123

4. Rationale for the revision of prerequisites/corequisites/special requirements: With BIOL 150 (Investigative Biotechnology Core I) and BIOL 151 (Investigative Biotechnology Core II) both moving to suspended status, these courses will no longer be available as a prerequisites for BIOL 312.

5. Effect on completion of major/minor sequence: None

6. Proposed term for implementation: Fall 2012

7. Dates of prior committee approvals:

Department of Biology: March 30, 2012

Ogden College Curriculum Committee: _____

Undergraduate Curriculum Committee: _____

University Senate: _____

Attachment: Course Inventory Form

Proposal Date: 6 March 2012

**Ogden College of Science and Engineering
Department of Biology
Proposal to Revise Course Prerequisites/Corequisites
(Consent Item)**

Contact Person: Scott Grubbs, scott.grubbs@wku.edu, 745-5048

1. Identification of course:

- 1.1 Course prefix (subject area) and number: BIOL 495
- 1.2 Course title: Molecular Genetics
- 1.3 Credit hours: 3

2. Current prerequisites/corequisites/special requirements: BIOL 312 or BIOL 150 and BIOL 151

3. Proposed prerequisites/corequisites/special requirements: BIOL 312

4. Rationale for the revision of prerequisites/corequisites/special requirements: With BIOL 150 (Investigative Biotechnology Core I) and BIOL 151 (Investigative Biotechnology Core II) both moving to suspended status, these courses will no longer be available as a prerequisites for BIOL 495.

5. Effect on completion of major/minor sequence: None

6. Proposed term for implementation: Fall 2012

7. Dates of prior committee approvals:

Department of Biology: March 30, 2012

Ogden College Curriculum Committee: _____

Undergraduate Curriculum Committee: _____

University Senate: _____

Attachment: Course Inventory Form

Proposal Date: 6 March 2012

**Ogden College of Science and Engineering
Department of Biology
Proposal to Suspend a Program
(Consent Item)**

Contact Person: Scott Grubbs, scott.grubbs@wku.edu, 745-5048

1. Identification of program:

- 1.1 Program reference number: 714
- 1.2 Program title: Major, Investigative Biotechnology
- 1.3 Credit hours: 48

2. Rationale for the program suspension: The Investigative Biotechnology (IB; Reference Number 714) major commenced during the 2007-2008 AY. The new IB major was essentially a revised and renamed version of the previous Recombinant Genetics major that was launched during the mid-1980's. Recombinant Genetics was a once-novel program for a comprehensive university, focusing mainly on the then- rapidly growing field of genetic engineering and molecular genetics.

The number of IB majors, however, has remained very low since its revised inception. Few students have graduated with an IB major (three total in four years), and only an additional 14 students are current IB majors. Moreover, beginning with the 2010-2011 AY the Biology Department stopped offering BIOL 150 (Investigative Biotechnology Core I) and BIOL 151 (Investigative Biotechnology Core II) due to low interest, the two principle core classes that serve as the prerequisites for the major. The Biology Department strongly feel that the two Biology majors, Program 617 (36-hour major, with a minor or second major) and Program 525 (48-hour major, without a minor), in addition to the Biochemistry major that is dually shared with the Chemistry Department, are sufficient to serve the whole of students entering WKU that are pursuing a degree in Biology.

3. Effect on current students or other departments, if known: None

4. Proposed term for implementation: Fall 2012

5. Dates of prior committee approvals:

Department of Biology:	March 30, 2012
OCSE Curriculum Committee:	_____
Undergraduate Curriculum Committee:	_____
University Senate:	_____

Attachment: Program Inventory Form

Proposal Date: 6 March 2012

**Ogden College of Science and Engineering
Department of Biology
Proposal to Suspend a Program
(Consent Item)**

Contact Person: Scott Grubbs, scott.grubbs@wku.edu, 745-5048

1. Identification of program:

- 1.1 Program reference number: 399
- 1.2 Program title: Minor, Investigative Biotechnology
- 1.3 Credit hours: 24

2. Rationale for the program suspension: The Investigative Biotechnology (IB; Reference Number 714) minor commenced during the 2007-2008 AY. The new IB minor was essentially a miniature version of the revised and renamed Recombinant Genetics major, IB major, that was launched during the mid-1980's. Recombinant Genetics was a once-novel program for a comprehensive university, focusing mainly on the then- rapidly growing field of genetic engineering and molecular genetics.

The number of IB minors, however, has remained very low since its revised inception. There have been no IB minor graduates and there is presently only one student active. Moreover, beginning with the 2010-2011 AY the Biology Department stopped offering BIOL 150 (Investigative Biotechnology Core I) and BIOL 151 (Investigative Biotechnology Core II) due to low interest, the two principle core classes that serve as the prerequisites for the major. The Biology Department strongly feel that the Biology minor is sufficient.

3. Effect on current students or other departments, if known: None

4. Proposed term for implementation: Fall 2012

5. Dates of prior committee approvals:

Department of Biology:	March 30, 2012
OCSE Curriculum Committee:	_____
Undergraduate Curriculum Committee:	_____
University Senate:	_____

Attachment: Program Inventory Form

Proposal Date: 2/20/2012

**Ogden College of Science and Engineering
Department of Chemistry
Proposal to Revise Course Catalog Listing
(Consent Item)**

Contact Person: Jeremy B Maddox, Jeremy.maddox@wku.edu, 5-8725

1. Identification of course:

- 1.1 Course prefix (subject area) and number: CHEM 451
- 1.2 Course title: Lab Physical Chemistry I
- 1.3 Credit hours: 2

2. Current course catalog listing:

A laboratory to accompany CHEM 450 and includes experiments on state of matter, surface phenomena, macromolecules, thermochemistry, thermodynamics and equilibria. Pre-lab lecture and laboratory meets four and one-half hours per week. (Course Fee)

3. Proposed course catalog listing:

A laboratory to accompany CHEM 450 that emphasizes the treatment and analysis of scientific data as well as formal scientific communication. Experiments may include measurements of thermochemical properties, phase and chemical equilibria, kinetic rates, spectroscopic properties, and supporting computational chemistry. Pre-lab lecture and laboratory meets 4.5 hours per week. (Course Fee)

4. Rationale for revision of the course catalog listing:

The primary rationale behind this change in the course catalog is to provide a more accurate description of the course content to the student body.

5. Proposed term for implementation: Fall 2012

6. Dates of prior committee approvals:

Chemistry Department/Division: 3/23/12

OCSE Curriculum Committee _____

Undergraduate Curriculum Committee _____

University Senate _____

Attachment: Course Inventory Form

Proposal Date: 2/20/2012

**Ogden College of Science and Engineering
Department of Chemistry
Proposal to Revise Course Catalog Listing
(Consent Item)**

Contact Person: Jeremy B Maddox, Jeremy.maddox@wku.edu, 5-8725

1. Identification of course:

- 1.1 Course prefix (subject area) and number: CHEM 452
- 1.2 Course title: Physical Chemistry II
- 1.3 Credit hours: 3

2. Current course catalog listing:

A continuation of CHEM 450 including studies of kinetics, atomic and molecular structure, theory of chemical bonding, electromotive force and selected topics.

3. Proposed course catalog listing:

A continuation of CHEM 450. Selected topics may include thermodynamics and equilibria, the kinetic theory of gases, transport properties, chemical kinetics, introductory quantum mechanics, spectroscopy, statistical thermodynamics, and interdisciplinary applications.

4. Rationale for revision of the course catalog listing:

The primary rationale behind this change in the course catalog is to provide a more detailed description of the course content to the student body, and to be consistent with the proposed changes for CHEM 450.

5. Proposed term for implementation: Spring 2013

6. Dates of prior committee approvals:

Chemistry Department/Division: 3/23/12

OCSE Curriculum Committee _____

Undergraduate Curriculum Committee _____

University Senate _____

Attachment: Course Inventory Form

Proposal Date: 2/20/2012

**Ogden College of Science and Engineering
Department of Chemistry
Proposal to Revise Course Catalog Listing
(Consent Item)**

Contact Person: Jeremy B Maddox, Jeremy.maddox@wku.edu, 5-8725

1. Identification of course:

- 1.1 Course prefix (subject area) and number: CHEM 453
- 1.2 Course title: Lab Physical Chemistry II
- 1.3 Credit hours: 2

2. Current course catalog listing:

A laboratory to accompany CHEM 452 and includes experiments on chemical kinetics, spectroscopy, molecular structure, electrochemistry and mass spectroscopy. Pre-lab lecture and laboratory meets four and one-half hours per week. (Course Fee)

3. Proposed course catalog listing:

A laboratory to accompany CHEM 452. Experiments may include measurements of thermochemical properties, phase and chemical equilibria, kinetic rates, spectroscopic properties, and supporting computational chemistry. Pre-lab lecture and laboratory meets 4.5 per week. (Course Fee)

4. Rationale for revision of the course catalog listing:

The primary rationale behind this change in the course catalog is to provide a more accurate description of the course content to the student body.

5. Proposed term for implementation: Spring 2013

6. Dates of prior committee approvals:

Chemistry Department/Division: 3/23/12

OCSE Curriculum Committee _____

Undergraduate Curriculum Committee _____

University Senate _____

Attachment: Course Inventory Form

Proposal Date: 2/27/2012

**Ogden College of Science and Engineering
Department of Mathematics and Computer Science
Proposal to Delete a Course
(Consent Item)**

Contact Person: Nezam Iraniparast, email: nezam.iraniparast@wku.edu, Phone: 56218

1. Identification of course:

- 1.1 Current course prefix (subject area) and number: MATH 175
- 1.2 Course title: University Experience - Mathematics
- 1.3 Credit hours: 2

2. Rationale for the course deletion: The course was designed to help freshmen and transfer students with fewer than 24 semester hours of credit learn about the math program, university resources and academic life in general. But, it has not been offered for 5 years. Since the course has lost its appeal and usage over time, the department has decided to delete it.

3. Effect of course deletion on programs or other departments, if known: None

4. Proposed term for implementation: Fall 2012

5. Dates of prior committee approvals:

Math and Computer Science Department:	3/16/2012
Ogden College Curriculum Committee	_____
Undergraduate Curriculum Committee	_____
University Senate	_____

Attachment: Course Inventory Form

Proposal Date: March 1, 2012

**Ogden College of Science and Engineering
Department of Mathematics and Computer Science
Proposal to Delete a Course
(Consent Item)**

Contact Person: Zhonghang Xia, zhonghang.xia@wku.edu, 745-6459

1. Identification of course:

- 1.1 Current course prefix (subject area) and number: CS 249
- 1.2 Course title: Consulting practicum in computer science
- 1.3 Credit hours: 1-2

2. Rationale for the course deletion:

This course has not been offered in many years, and the computer science faculty wishes to remove it from its list of courses."

3. Effect of course deletion on programs or other departments, if known:

N/A

4. Proposed term for implementation:

Fall 2012

5. Dates of prior committee approvals:

Department of Math and CS March 20, 2012

Ogden College Curriculum Committee _____

Undergraduate Curriculum Committee _____

University Senate _____

Attachment: Course Inventory Form

Proposal Date: March 1, 2012

**Ogden College of Science and Engineering
Department of Mathematics and Computer Science
Proposal to Delete a Course
(Consent Item)**

Contact Person: Zhonghang Xia, zhonghang.xia@wku.edu, 745-6459

1. Identification of course:

- 1.1 Current course prefix (subject area) and number: CS 349
- 1.2 Course title: Consulting practicum in computer science
- 1.3 Credit hours: 1-2

2. Rationale for the course deletion:

This course has not been offered in many years, and the computer science faculty wishes to remove it from its list of courses.

3. Effect of course deletion on programs or other departments, if known:

N/A

4. Proposed term for implementation:

Fall 2012

5. Dates of prior committee approvals:

Department of Math and CS March 20, 2012

Ogden College Curriculum Committee _____

Undergraduate Curriculum Committee _____

University Senate _____

Attachment: Course Inventory Form

Proposal Date: March 1, 2012

**Ogden College of Science and Engineering
Department of Mathematics and Computer Science
Proposal to Reactivate a Suspended Course
(Consent Item)**

Contact Person: Zhonghang Xia, zhonghang.xia@wku.edu, 745-6459

1. Identification of course:

- 1.1 Current course prefix (subject area) and number: CS 299
- 1.2 Course title: Introduction to research in computer science
- 1.3 Credit hours: 3

2. Rationale for the course reactivation:

This course provides a research opportunity to undergraduates.

3. Effect of course reactivation on programs or other departments, if known:

None.

4. Proposed term for implementation: Fall 2012

5. Dates of prior committee approvals:

Math and CS Department March 20, 2012

Ogden College Curriculum Committee _____

Undergraduate Curriculum Committee _____

University Senate _____

Attachment: Course Inventory Form

Proposal Date: March 1, 2012

**Ogden College of Science and Engineering
Department of Mathematics and Computer Science
Proposal to Reactivate a Suspended Course
(Consent Item)**

Contact Person: Zhonghang Xia, zhonghang.xia@wku.edu, 745-6459

1. Identification of course:

- 1.1 Current course prefix (subject area) and number: CS 406
- 1.2 Course title: Numerical Analysis II
- 1.3 Credit hours: 3

2. Rationale for the course reactivation:

This course is equivalent to MATH 406, which is currently offered in the mathematics division. Reactivation of CS 406 gives computer science students an opportunity to choose another elective course

3. Effect of course reactivation on programs or other departments, if known:

None.

4. Proposed term for implementation: Fall 2012

5. Dates of prior committee approvals:

Math and CS Department March 20, 2012

Ogden College Curriculum Committee _____

Undergraduate Curriculum Committee _____

University Senate _____

Attachment: Course Inventory Form

Proposal Date: 6 March 2012

**Ogden College of Science and Engineering
Department of Biology
Proposal to Make Multiple Revisions to a Course
(Action Item)**

Contact Person: Scott Grubbs, scott.grubbs@wku.edu, 745-5048

1. Identification of course:

- 1.1 Current course prefix (subject area) and number: BIOL 199
- 1.2 Course title: Introduction to Research Experience
- 1.3 Credit hours: 1

2. Revise course title:

- 2.1 Current course title: NA
- 2.2 Proposed course title: NA
- 2.3 Proposed abbreviated title: NA
- 2.4 Rationale for revision of course title: NA

3. Revise course number:

- 3.1 Current course number: NA
- 3.2 Proposed course number: NA
- 3.3 Rationale for revision of course number: NA

4. Revise course prerequisites/corequisites/special requirements:

- 4.1 Current prerequisites: Restricted to majors in BIOL 714 – Investigative Biotechnology
- 4.2 Proposed prerequisites/corequisites/special requirements: None
- 4.3 Rationale for revision of course prerequisites/corequisites/special requirements: Because the Investigative Biotechnology major, Program Number 714, will go into suspended status, the current prerequisite is no longer attainable. The Biology Department wishes, however, to retain the course and make available to all Biology majors and minors.
- 4.4 Effect on completion of major/minor sequence: Due to the fact that this class is not required for the major or the minor and is only one credit hour, it should have a negligible effect the completion of the major/minor.

5. Revise course catalog listing:

- 5.1 Current course catalog listing: Introduces students to research through laboratory rotations. Each student will participate in two different rotations with two different faculty members. (Grading: Pass/Fail)
- 5.2 Proposed course catalog listing: Introduces students to biological research through hands-on, small group sessions. Each student will learn research techniques in modern biology with a focus on ethics and critical thinking. (Grading: Pass/Fail)

5.3 Rationale for revision of course catalog listing: In expanding access to this class it must be broad enough to meet the needs of students in all areas of biology, including clinical, field, and laboratory research.

6. Revise course credit hours:

6.1 Current course credit hours: NA

6.2 Proposed course credit hours: NA

6.3 Rationale for revision of course credit hours NA:

7. Proposed term for implementation: Fall 2012

8. Dates of prior committee approvals:

Department of Biology: March 30, 2012

OCSE Curriculum Committee: _____

Undergraduate Curriculum Committee: _____

University Senate: _____

Attachment: Course Inventory Form

**Ogden College of Science and Engineering
Department of Chemistry
Proposal to Make Multiple Revisions to a Course
(Action Item)**

Contact Person: Jeremy B. Maddox, Jeremy.maddox@wku.edu, 5-8725

1. Identification of course:

- 1.1 Current course prefix (subject area) and number: CHEM 450
- 1.2 Course title: Physical Chemistry I
- 1.3 Credit hours: 3

2. Revise course title: N/A

- 2.1 Current course title:
- 2.2 Proposed course title:
- 2.3 Proposed abbreviated title:
- 2.4 Rationale for revision of course title:

3. Revise course number: N/A

- 3.1 Current course number:
- 3.2 Proposed course number:
- 3.3 Rationale for revision of course number:

4. Revise course prerequisites/corequisites/special requirements:

- 4.1 Current prerequisites/corequisites/special requirements: (indicate which)

Prerequisites: CHEM 330 and PHYS 270

Corequisites: CHEM 451, MATH 227

- 4.2 Proposed prerequisites/corequisites/special requirements:

Prerequisites: CHEM 330 and PHYS 265

Corequisites: CHEM 451 and MATH 137

- 4.3 Rationale for revision of course prerequisites/corequisites/special requirements:

PHYS 270 has been deleted some time ago. The prerequisite for CHEM 450 needs to be changed to the appropriate course, which is PHYS 265.

MATH 227 has recently been changed to MATH 137. The corequisite for CHEM 450 needs to be updated to reflect this change.

- 4.4 Effect on completion of major/minor sequence: N/A

5. Revise course catalog listing:

5.1 Current course catalog listing:

A study of theoretical chemistry, including such topics such as gaseous state, solid state, liquid state, thermodynamics, thermochemistry and phase and chemical equilibria.

5.2 Proposed course catalog listing:

A detailed study of the fundamental principles and models describing the physical and chemical properties of matter at both the microscopic and macroscopic levels. Selected topics may include thermodynamics and equilibria, the kinetic theory of gases, transport properties, chemical kinetics, introductory quantum mechanics, spectroscopy, statistical thermodynamics, and interdisciplinary applications.

5.3 Rationale for revision of course catalog listing:

The primary rationale behind this change in the course catalog is to provide a more detailed description of the course content to the student body. A secondary rationale is to make the course catalog description more consistent with guidelines established by the American Chemical Society's Committee on Professional Training.

6. Revise course credit hours: N/A

6.1 Current course credit hours:

6.2 Proposed course credit hours:

6.3 Rationale for revision of course credit hours:

7. Proposed term for implementation: Fall 2012

8. Dates of prior committee approvals:

Chemistry Department/Division: 3/23/12

OCSE Curriculum Committee _____

Undergraduate Curriculum Committee _____

University Senate _____

Attachment: Course Inventory Form

Proposal Date: March 6, 2012

**Ogden College of Science and Engineering
Department of Physics and Astronomy
Proposal to Create a Temporary Course
(Information Item)**

Contact Person: Scott Bonham, 270-745-6196, scott.bonham@wku.edu

1. Identification of proposed course

- 1.1 Course prefix (subject area) and number: PHYS 215
- 1.2 Course title: Learning Assistants for Physics Courses
- 1.3 Abbreviated course title: Physics Learning Assistants
- 1.4 Credit hours: 1 h
- 1.5 Schedule type: seminar
- 1.6 Prerequisites/corequisites: permission of instructor
- 1.7 Course description: Introduces students to basic theory and practical skills for assisting instructors as Learning Assistants in active engagement physics courses.

2. Rationale

- 2.1 Reason for offering this course on a temporary basis: Be offered for Fall 2012
- 2.2 Relationship of the proposed course to courses offered in other academic units: SMED 101 is an introduction to using active engagement in science and math courses, but the focus is preparing students to experience teaching a lesson at the advanced elementary level and not assisting in a college level course. This course is modeled after a course developed at the University of Colorado for providing Learning Assistants with background and skills to assist faculty in active engagement physics courses, so it will have a strong physics focus.

3. Description of proposed course

- 3.1 Course content outline
 - Five principles of effective physics instruction
 - Discussion techniques-univocal/dialogic discourse
 - Classroom discourse and Bloom's Taxonomy
 - Cognitive studies and teaching physics
 - Student conceptions in physics and formative assessment
 - Resource perspectives in physics
 - Cooperative learning
 - Problem solving strategies
 - Argumentation and metacognition
 - Nature of science
 - Qualities of an effective teacher
- 3.2 Tentative text(s)

R. Knight, *Five Easy Lessons: Strategies for Successful Physics Teaching*, (Addison Wesley, San Francisco, 2004)
Course packet of readings

4. Dates of review/approvals:

Physics and Astronomy Department 3/14/2012

OCSE Curriculum Committee _____

OCSE Dean _____

UCC Chair _____

Provost: _____

Attachment: Course Inventory Form

**Ogden College of Science and Engineering
Department of Engineering
Proposal to Create a Temporary Course
(Information Item)**

Contact Person: Joel Lenoir, joel.lenoir@wku.edu, 270-745-6858

1. Identification of proposed course

- 1.1 Course prefix (subject area) and number: ME333
- 1.2 Course title: Heat Transfer Laboratory
- 1.3 Abbreviated course title: Heat Transfer Laboratory
- 1.4 Credit hours: 1
- 1.5 Schedule type: B, Lab
- 1.6 Corequisites: ME325
- 1.7 Course description:

An applied laboratory demonstrating physical concepts of the various modes of heat transfer, as well as modeling and prediction of heat transfer devices or systems. The lab will enhance the design component of the ME325 course, providing a structured environment for the application of heat transfer principles to actual problems.

2. Rationale

- 2.1 Reason for offering this course on a temporary basis:
- 2.2 This course divides of the topical coverage of the existing ME440 into two labs coupled to their respective engineering science courses. ME333 will be coupled in the fall semester to ME325. It will also retain some of the Design of Experiments Plan material from ME440. The offering provides the student with a direct linkage with ME325 and creates a more integrated and streamlined ME senior year in engineering laboratory practices. The course focuses on heat transfer and supports the ABET requirement of a balance to both stems of the curriculum.
- 2.3 Relationship of the proposed course to courses offered in other academic units: Similar laboratory course are offered at numerous institutions as standalone heat transfer laboratories. Other institutions couple a discrete laboratory course with a specific heat transfer engineering science lecture course. The structure of ME333 provides the latter with ample coverage of heat transfer applications and numerical simulations in a controlled laboratory environment coupled with reinforcing lectures on laboratory relevant engineering science topics coincident with ME325. Additionally, it is unique in that instruction on the ME Program Design of Experiments plan is deployed which supports design validation activities in the student's senior capstone design experience.

3. Description of proposed course

- 3.1 Course content outline
List of Selected Experiments:

- Heat Exchanger Experiment
- Conduction Heat Transfer Experiment
- Convection Heat Transfer Experiment
- Radiation Heat Transfer Experiment
- Analysis using Heat Transfer software

Design of Experiments Plan Topics:

- Experimental Planning
- Methods of Measurement
- Selection of Instrumentation
- Prediction of Uncertainty
- Analysis of Data and Results
- Estimation of Error
- Reporting of Experimental Results

Design Project Implementation sessions

3.2 Tentative text(s):

No required textbook. Laboratory handouts will be provided. Textbooks used in ME310 and ME325 will serve as reference sources for the course.

4. Second offering of a temporary course (if applicable)

4.1 Reason for offering this course a second time on a temporary basis:

4.2 Term course was first offered:

4.3 Enrollment in first offering:

5. Term of Implementation:

6. Dates of review/approvals:

_____ Department/Division: _____

_____ Curriculum Committee _____

_____ Dean _____

UCC Chair _____

Provost: _____

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