

MEMORANDUM TO: Ogden College of Science and Engineering Curriculum Committee

Dr. Jack Rudolph	Dr. James Gary	Dr. Greg Arbuckle
Dr. Martin Stone	Dr. Rong Yang	Dr. John Khouryieh
Dr. Bruce Schulte	Dr. Julie Ellis	Dr. Bruce Kessler
Dr. Phil Lienesch	Dr. Warren Campbell	Dr. Richard Schugart
Dr. Cathleen Webb	Dr. David Keeling	Dr. Keith Andrew
Dr. Hemali Rathnayake	Dr. Xingang Fan	Dr. Elizabeth Lemerise
Dr. Les Pesterfield		Dr. Matthew Shake

FROM: Kenneth Crawford, Chair

SUBJECT: Agenda for Thursday, April 3, 2014 4:00 p.m. in COHH 4123

A. OLD BUSINESS:

I. Consideration of the minutes of the March 6, 2014 & special electronic March 7, 2014 meeting.

B. NEW BUSINESS:

Action Items

Department of Agriculture

I. Proposal to Create a New Course
a. AGRI 323, Wine Fundamentals, 3 hrs.

Department of Engineering

I. Proposal to Revise a Program
a. Ref. 534P, Civil Engineering-Prep, 35 hrs.
b. Ref. 534, Civil Engineering, 136 hrs.

C. OTHER BUSINESS

MEMBERS PRESENT:

Dr. Martin Stone
Dr. Les Pesterfield
Dr. Cathleen Webb
Dr. Phil Lienesch
Dr. Hemali Rathnayake
Dr. James Gary
Dr. Rong Yang
Dr. Warren Campbell
Dr. Greg Arbuckle

Dr. David Keeling
Dr. John Khouryieh
Dr. Bruce Kessler
Dr. Richard Schugart
Dr. Keith Andrew
Dr. Elizabeth Lemerise
Dr. Matthew Shake
Dr. Xingang Fan

FROM: Ken Crawford, Chair

OLD BUSINESS:

Keeling/Arbuckle moved approval of the minutes from the March 6, 2014 meeting. Motion passed with friendly amendment to change “Warren” to “Campbell” for consistency purposes.

NEW BUSINESS:

Consent Agenda

Department of Geography & Geology

All consent items were passed as presented on a Keeling/Arbuckle motion.

Action Agenda

Department of Architectural Manufacturing Sciences

Keeling/Lemerise moved to bundle and approve proposals to create a new course, items a-yy. Motion passed.

Kessler/Lemerise moved to bundle and approve proposals to create a new certificate program, items a-d. Motion passed.

Keeling/Campbell moved to approve proposal to revise a program, Ref. 518 Major in Architectural Sciences. Motion passed.

Department of Chemistry

Keeling/Campbell moved to approve proposal to revise a program, Ref. 335 Minor in Chemistry. Motion passed.

Department of Geography & Geology

Keeling/Pesterfield moved to bundle and approve proposals to make multiple revisions to a course, items a-e. Motion passed.

Keeling/Pesterfield moved to approve proposal to make multiple revisions to a course, GEOG 492, Advanced Spatial Analysis. Motion passed.

OTHER BUSINESS:

No other business. Meeting was adjourned at 4:32 p.m.

MEMBERS PRESENT (submitted vote via email):

Dr. Xingang Fan	Dr. John Khouryieh
Dr. Martin Stone	Dr. Mathew Shake
Dr. Hemali Rathnayake	Dr. David Keeling
Dr. James Gary	Dr. Richard Schugart
Dr. Rong Yang	Dr. Elizabeth Lemerise
Dr. Bruce Kessler	Dr. Keith Andrew
Dr. Greg Arbuckle	

FROM: Ken Crawford, Chair

OLD BUSINESS:

No old business.

NEW BUSINESS:

Action Agenda

Department of Engineering

Keeling/Lemerise moved approval of the proposal to revise a program, Ref. 506, Advanced Manufacturing. Motion passed.

OTHER BUSINESS:

No other business. Meeting was adjourned at 8:11 p.m.

Proposal Date: March 6, 2014

Ogden College of Science and Engineering
Department of Agriculture
Proposal to Create a New Course
(Action Item)

Contact Person: Todd Willian, todd.willian@wku.edu, 745-5969

1. Identification of proposed course:

- 1.1 Course prefix (subject area) and number: AGRI 323
- 1.2 Course title: Wine Fundamentals
- 1.3 Abbreviated course title: Wine Fundamentals
- 1.4 Credit hours: 3 Variable credit (yes or no) No
- 1.5 Grade type: Standard letter grade
- 1.6 Prerequisites/corequisites: Must be at least 21 years old
- 1.7 Course description: Historical and agricultural origins of wine, including important grape varieties and principles of fermentation. Major wine-producing regions and fundamentals of wine marketing are also explored.

2. Rationale:

- 2.1 Reason for developing the proposed course: This course complements the educational experience from the vineyard (HORT 426) to include the winemaking process. Wine production is currently a growing agribusiness in the Commonwealth; licensed wineries have increased four-fold in the past 15 years.
- 2.2 Projected enrollment in the proposed course:
Approximately 20 per semester based upon enrollment in two previous temporary course offerings. A majority of the temporary course enrollments have been students from outside the Department of Agriculture.
- 2.3 Relationship of the proposed course to courses now offered by the department:
The proposed course will supplement Viticulture (HORT 426), which explores grape production techniques in detail, thus completing the grape/wine linkage.
- 2.4 Relationship of the proposed course to courses offered in other departments:
The Department of History offers HIST 341 (A Cultural History of Alcohol) and Geology/Geography has offered GEOG 475 (Geography of Wine). Both courses complement rather than duplicate AGRI 323 topics. Historical and geographical perspectives are components of the learning objectives of AGRI 323 but are not inclusive of the broad scope of the course.
- 2.5 Relationship of the proposed course to courses offered in other institutions:
Many institutions offer similar courses. Comparable courses include: HORT 59000 – Commercial Grape and Wine Production, Purdue University; GEN 300 – Wine Appreciation, University of Kentucky; and HADM 4300 - Introduction to Wines, Cornell University.

3. Discussion of proposed course:

3.1 Schedule type: L - Lecture

3.2 Learning Outcomes: Upon completion of this course students will have gained:

- An historical overview of global and domestic wine production.
- Theoretical and hands-on experiences with various stages of wine production, including the process of fermentation.
- Recognition of the importance of wine in national and international economies.
- An overview of important wine varieties and their primary geographical centers of production.
- Understanding of the fundamentals of wine sales, including branding, marketing, importation, and distribution.

3.3 Content outline:

- The history of wine and winemaking
- The geography of wine and winegrape varieties
- Winemaking styles and strategies
- Interpreting wine labels
- The processes of fermentation and malolactic fermentation
- The influence of geological formations upon wine chemistry and taste
- Wine branding and marketing
- Wine importation and distribution
- The Kentucky wine industry
- Selecting wine at a retail outlet and at a restaurant

3.4 Student expectations and requirements:

Assigned readings, examinations and quizzes, and writing assignments. Individual and/or group presentations may be assigned.

3.5 Tentative texts and course materials:

Zraly, K. (2009). *Windows on the World Complete Wine Course*. Sterling Press, 338 p.

Robinson, J. (2006). *The Oxford Companion to Wine*, 3rd edition. Oxford University Press, 840 p.

4. Resources:

4.1 Library resources: See attached Library Resource Form and Bibliography

4.2 Computer resources: Adequate

5. Budget implications:

5.1 Proposed method of staffing: Part-time Instructor.

5.2 Special equipment needed: None.

5.3 Expendable materials needed: None.

5.4 Laboratory materials needed: None.

6. Proposed term for implementation: Spring 2015

7. Dates of prior committee approvals:

Department of Agriculture

March 6, 2014

OCSE Curriculum Committee

NA

NA

Undergraduate Curriculum Committee

University Senate

**Ogden College of Science and Engineering
Department of Engineering
Proposal to Revise A Program
(Action Item)**

Contact Person: Shane M. Palmquist, shane.palmquist@wku.edu, 745-2919

1. Identification of program:

- | | | |
|-----|-----------------------------------|------------------------|
| 1.1 | Current program reference number: | 534P |
| 1.2 | Current program title: | Civil Engineering-Prep |
| 1.3 | Current credit hours: | 35 |
| | Proposed credit hours: | 38 or 39 |

2. Identification of the proposed program changes:

- Require that students must complete MATH 237 Multivariable Calculus (4 hrs) or MATH 331 Differential Equations (3 hrs) with a grade of “C” or better.
- Increase the number of credit hours in the pre-major program from 35 to 38 or 39.

3. Detailed program description:

The existing statement in the undergraduate catalog is:

To transition from pre-major to major and to graduate with a degree in civil engineering, students must complete each of the following courses and labs with a grade of “C” or better: CE 176, AMS 163, ENG 100, CE 160 and 161, EM 221 or 222, COMM 145 or 161, MATH 136 and 137, PHYS 255 and 256, and CHEM 120 and 121.

The proposed statement in the undergraduate catalog is:

To transition from pre-major to major and to graduate with a degree in civil engineering, students must complete each of the following courses and labs with a grade of “C” or better: CE 176, AMS 163, ENG 100, CE 160 and 161, EM 221 or 222, COMM 145 or 161, MATH 136 and 137, MATH 237 or 331, PHYS 255 and 256, and CHEM 120 and 121.

For a side by side comparison, see the next page.

Current Program Courses	Hrs	Proposed Program Courses	Hrs
CE 176 Civil Engineering Freshman Design	1	CE 176 Civil Engineering Freshman Design	1
AMS 163 Architectural Drafting	3	AMS 163 Architectural Drafting	3
MATH 136 Calculus I	4	MATH 136 Calculus I	4
MATH 137 Calculus II	4	MATH 137 Calculus II	4
		MATH 237 Multivariable Calculus or MATH 331 Differential Equations	4 or 3
CE 160 Principles of Surveying	3	CE 160 Principles of Surveying	3
CE 161 Principles of Surveying Lab	1	CE 161 Principles of Surveying Lab	1
ENG 100 Freshman English	3	ENG 100 Freshman English	3
PHYS 255 University Physics I	4	PHYS 255 University Physics I	4
PHYS 256 University Physics I Lab	1	PHYS 256 University Physics I Lab	1
EM 221 or 222 Statics	3	EM 221 or 222 Statics	3
COMM 145 Fund. of Public Speaking or COMM 161 Business & Prof. Speaking	3	COMM 145 Fund. of Public Speaking or COMM 161 Business & Prof. Speaking	3
CHEM 120 College Chemistry I	4	CHEM 120 College Chemistry I	4
CHEM 121 College Chemistry I Lab	1	CHEM 121 College Chemistry I Lab	1

Total hours = 35

Total hours = 38 or 39

4. Rationale for the proposed program change:

- The civil engineering, mechanical engineering and electrical engineering programs are trying to harmonize the pre-major requirements in mathematics. The pre-major in civil engineering currently requires students to complete only MATH 136 or 137 with a grade of “C” or better. Hence, the same requirement is being proposed for the pre-major in civil engineering, thereby increasing the number of hours from 35 to 38 or 39.

5. Proposed term for implementation: Fall 2015

6. Dates of prior committee approvals:

Department of Engineering 3/20/2014

Ogden College Curriculum Committee _____

Undergraduate Curriculum Committee _____

University Senate _____

**Ogden College of Science and Engineering
Department of Engineering
Proposal to Revise a Program
(Action Item)**

Contact Person: Shane M. Palmquist
Shane.Palmquist@wku.edu
 745-2919

1. Identification of program:

- 1.1 Current program reference number: 534
- 1.2 Current program title: Engineering-Civil
- 1.3 Credit hours: 136

2. Identification of the proposed program changes:

- Delete ENGR 175 University Experience-Engineering (1 hr).
- Delete ECON 202 Microeconomics (3 hr).
- Add GEOL 111 The Earth (3 hrs) and GEOL 113 The Earth Laboratory (1 hr).
- Require that students earn a grade of “C” or better in MATH 237 Multivariable Calculus (4 hr) and MATH 331 Differential Equations (3 hr).
- Give students the option of taking the new course CE 305 Risk Analysis (3 hrs) or STAT 301 Probability and Statistics (3 hrs), which is currently a required course. A grade of “C” or better is required in either course.

3. Detailed program description:

CE Current Program

CE Proposed Program

Prefix	#	Course Title	Hrs.	Prefix	#	Course Title	Hrs.
ENGR or UE	175	University Experience	1 or 2				
CE	176	CE Freshman Design	1	CE	176	CE Freshman Design	1
CE	160	Prin. of Surveying	3	CE	160	Prin. of Surveying	3
CE	161	Surveying Lab	1	CE	161	Surveying Lab	1
CE	303	Constr. Management	3	CE	303	Constr. Management	3
CE	304	Constr. Management Lab	1	CE	304	Constr. Management Lab	1
				CE or STAT	305	Risk Analysis	3
					301	Probability & Statistics	
CE	310	Strengths Lab	1	CE	310	Strengths Lab	1

Prefix	#	Course Title	Hrs.	Prefix	#	Course Title	Hrs.
CE	316	Equip. & Methods	3	CE	316	Equip. & Methods	3
CE	331	Transportation Eng.	3	CE	331	Transportation Eng.	3
CE	341 or 342	Fluid and Thermal Science	4	CE	341 or 342	Fluid and Thermal Science	4
CE	351 or 352	Intro. to Environmental Engineering	3	CE	351 or 352	Intro. to Environmental Engineering	3
CE	370	Matls. of Constr,	2	CE	370	Matls. of Constr,	2
CE	371	Matls. of Constr. Lab	1	CE	371	Matls. of Constr. Lab	1
CE	382 or 373	Structural Analysis	3	CE	382 or 373	Structural Analysis	3
CE	384 or 482 or 483	Civil Engineering Design Course	3	CE	384 or 482 or 483	Civil Engineering Design Course	3
CE	410	Soil Mechanics	3	CE	410	Soil Mechanics	3
CE	411	Soil Mechanics Lab	1	CE	411	Soil Mechanics Lab	1
CE	412	Foundation Eng.	3	CE	412	Foundation Eng.	3
CE	461	Hydrology	3	CE	461	Hydrology	3
CE	400	Senior Proj. Seminar	1	CE	400	Senior Proj. Seminar	1
CE	498	Senior Project	3	CE	498	Senior Project	3
CE		Technical Elective	3	CE		Technical Elective	3
CE		Technical Elective	3	CE		Technical Elective	3
CE		Technical Elective	3	CE		Technical Elective	3
AMS	163	Arch. Drafting	3	AMS	163	Arch. Drafting	3
EM	221 or 222	Statics	3	EM	221 or 222	Statics	3
EM	302 or 303	Mechanics of Deformable Bodies	3	EM	302 or 303	Mechanics of Deformable Bodies	3
TOTALS		Credit Hours	65 or 66	TOTALS		Credit Hours	67

Other Requirements

Other Proposed Requirements

Prefix	#	Course Title	Hrs.	Prefix	#	Course Title	Hrs.
MATH	136	Calculus I	4	MATH	136	Calculus I	4
MATH	137	Calculus II	4	MATH	137	Calculus II	4
MATH	237	Multivariable Calculus	4	MATH	237	Multivariable Calculus	4
MATH	331	Differential Equations	3	MATH	331	Differential Equations	3
STAT	301	Probability & Statistics	3				
PHYS	255	University Physics I	4	PHYS	255	University Physics I	4
PHYS	256	Physics I Lab	1	PHYS	256	Physics I Lab	1
PHYS	265	University Physics II	4	PHYS	265	University Physics II	4
PHYS	266	Physics II Lab	1	PHYS	266	Physics II Lab	1
CHEM	120	College Chemistry I	3	CHEM	120	College Chemistry I	3
CHEM	121	Chemistry I Lab	2	CHEM	121	Chemistry I Lab	2
				GEOL	111	The Earth	3
				GEOL	113	The Earth Lab	1
ECON	202	Microeconomics	3				
HIST	119 or 120	Western Civilization	3	HIST	119 or 120	Western Civilization	3
TOTALS		Credit Hours	42	TOTALS		Credit Hours	36

CE Current Program:

Students must have a grade of “C” or better in:

- All CE courses including technical electives (except for one (1) CE 400 level course), and
- EM 221 or 222: Statics, and EM 302 or 303: Mechanics of Deformable Solids.

CE Proposed Program:

Students must have a grade of “C” or better in:

- **All math courses,**
- **All premajor courses,**
- All CE courses including technical electives (except for one (1) CE 400-level course),
- **EM 302 or 303 Mechanics of Deformable Solids, and**
- **MATH 237 Multivariable Calculus, MATH 331 Differential Equations and STAT 301 Probability and Statistics if taken.**

4. Rationale for the proposed program change:

- Delete ENGR 175 University Experience-Engineering (1 hr).

This one credit course is not needed for students pursuing a major in civil engineering. If a student would like to take a University Experience course with or without an engineering component (CE 175 or UE 175), the civil engineering program faculty and department feel that this should be optional and not required.

- Delete ECON 202 Microeconomics (3 hr).

Concepts in economics important to civil engineering students will be covered in other engineering courses.

- Add GEOL 111 The Earth (3 hrs) and GEOL 113 The Earth Laboratory (1 hr).

This course and lab used to be required of the “pre-major” in civil engineering. However, the course and lab were removed as part of the “pre-major” requirement several years ago. Civil engineering students were still required to take this course and lab since they were prerequisites for CE 410 Soil Mechanics (3 hrs). The civil engineering program faculty and the department would like to formally add these to the major so that the total credit hours for the degree will reflect all courses/labs to be taken.

- Students must earn a grade of “C” or better in MATH 237 Multivariable Calculus (4 hr) and MATH 331 Differential Equations (3 hr).

Currently, students can earn a grade of “D” or better in either or both of these math courses. The civil engineering program faculty and department feel that a grade of “C” or better is necessary so that civil engineers students can more adequately apply advanced mathematical concepts and solution techniques to engineering problems seen in junior and senior level engineering coursework.

- Give students the option of taking the new course CE 305 Risk Analysis (3 hrs) or STAT 301 Probability and Statistics (3 hrs), which is currently a required course. A grade of “C” or better is required in either course.

Requiring a grade of “C” or better in CE 305 Risk Analysis is consistent with the current requirement that all civil engineering students must get a “C” or better in all CE prefixed courses and technical electives (except for one (1) CE 400 level course where a grade of “D” may be earned). Requiring a grade of “C” or better in STAT 301 Probability and Statistics is consistent with the proposed change that students earn a “C” or better in all math courses.

Allowing students to take CE 305 Risk Analysis or STAT 301 Probability or Statistics will allow students greater flexibility and choice in scheduling of classes.

5. Proposed term for implementation: Fall 2015

6. Dates of prior committee approvals:

Department of Engineering: 3/20/2014

Ogden Curriculum Committee: _____

University Curriculum Committee: _____

University Senate: _____