

**Undergraduate Curriculum Committee  
Western Kentucky University**

***Report to the University Senate:***

**Date:** 31 August 2010

**From:** Pamela Petty, Chair

The Undergraduate Curriculum Committee submits the following items from the 26 August 2010 meeting for approval by the University Senate:

**Information Item Report:**

1. **OCSE** GEOG 206, Mid-Latitude Cyclones  
GEOL 429, Broadcast Meteorology  
GEOL 370, Principles of Stratigraphy  
GEOL 470, Tectonics  
GEOL 480, Coal Geology  
GEOL 486, Senior Environmental Seminar  
GEOL 490, Petroleum Geology  
GEOL 419, GIS Application Development

**Consent Item Report:**

1. **OCSE** #576, Geographic Information Systems  
#269, A. S. Degree in Meteorological Technology  
ENGR 175, University Experience – Engineering  
MATH 203, Statistics

Proposal Date: 4/23/2010

Ogden College of Science and Engineering  
Department of Geography and Geology  
Proposal to Delete a Course  
(Consent Item)

Contact Person: David Keeling ([david.keeling@wku.edu](mailto:david.keeling@wku.edu)) 5-4555

1. Identification of course:
  - 1.1 Current course prefix (subject area) and number: GEOG 206
  - 1.2 Course title: Mid-Latitude Cyclones
  - 1.3 Credit hours: 1
2. Rationale for the course deletion:

Content now covered in GEOG 121, 122, and 222.
3. Effect of course deletion on programs or other departments, if known:

None known
4. Proposed term for implementation: Fall 2010
5. Dates of prior committee approvals:

Geography and Geology Department	<u>4/23/2010</u>
Ogden College Curriculum Committee	<u>5/06/2010</u>
Undergraduate Curriculum Committee	_____
University Senate	_____

Attachment: Course Inventory Form

Proposal Date: 4/23/2010

Ogden College of Science and Engineering  
Department of Geography and Geology  
Proposal to Delete a Course  
(Consent Item)

Contact Person: David Keeling ([david.keeling@wku.edu](mailto:david.keeling@wku.edu)) 5-4555

1. Identification of course:
  - 1.1 Current course prefix (subject area) and number: GEOG 429
  - 1.2 Course title: Broadcast Meteorology
  - 1.3 Credit hours: 3
2. Rationale for the course deletion:

Content now covered in BCOM 429 Broadcast Meteorology
3. Effect of course deletion on programs or other departments, if known:

None known
4. Proposed term for implementation: Fall 2010
5. Dates of prior committee approvals:

Geography and Geology Department	<u>4/23/2010</u>
Ogden College Curriculum Committee	<u>5/06/10</u>
Undergraduate Curriculum Committee	_____
University Senate	_____

Attachment: Course Inventory Form

Proposal Date: 4/23/2010

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

Contact Person: David Keeling ([david.keeling@wku.edu](mailto:david.keeling@wku.edu)) – 5-4555

1. Identification of course:
  - 1.1 Current course prefix (subject area) and number: GEOL 370
  - 1.2 Course title: Principles of Stratigraphy
  - 1.3 Credit hours: 3
2. Rationale for the course suspension: Not offered for several years. The Department plans to reactivate this course in the future when new faculty are appointed with expertise in this area.
3. Effect of course suspension on programs or other departments, if known:  
None known.
4. Proposed term for implementation:                      Fall 2010
5. Dates of prior committee approvals:

Geography and Geology Department	<u>4/23/2010</u>
Ogden College Curriculum Committee	<u>5/06/10</u>
Undergraduate Curriculum Committee	<u>                    </u>
University Senate	<u>                    </u>

Attachment: Course Inventory Form

Proposal Date: 4/23/2010

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

Contact Person: David Keeling ([david.keeling@wku.edu](mailto:david.keeling@wku.edu)) – 5-4555

1. Identification of course:
  - 1.1 Current course prefix (subject area) and number: GEOL 470
  - 1.2 Course title: Tectonics
  - 1.3 Credit hours: 3
2. Rationale for the course suspension: Not offered for several years. The Department plans to reactivate this course in the future when new faculty are appointed with expertise in this area.
3. Effect of course suspension on programs or other departments, if known:  
None known.
4. Proposed term for implementation:                      Fall 2010
5. Dates of prior committee approvals:

Geography and Geology Department	<u>4/23/2010</u>
Ogden College Curriculum Committee	<u>5/06/10</u>
Undergraduate Curriculum Committee	<u>                    </u>
University Senate	<u>                    </u>

Attachment: Course Inventory Form

Proposal Date: 4/23/2010

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

Contact Person: David Keeling ([david.keeling@wku.edu](mailto:david.keeling@wku.edu)) – 5-4555

1. Identification of course:
  - 1.1 Current course prefix (subject area) and number: GEOL 480
  - 1.2 Course title: Coal Geology
  - 1.3 Credit hours: 3
2. Rationale for the course suspension: Not offered for several years. The Department plans to reactivate this course in the future when new faculty are appointed with expertise in this area.
3. Effect of course suspension on programs or other departments, if known:  
None known.
4. Proposed term for implementation:                      Fall 2010
5. Dates of prior committee approvals:

Geography and Geology Department	<u>4/23/2010</u>
Ogden College Curriculum Committee	<u>5/06/10</u>
Undergraduate Curriculum Committee	<u>                    </u>
University Senate	<u>                    </u>

Attachment: Course Inventory Form

Proposal Date: 4/23/2010

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

Contact Person: David Keeling ([david.keeling@wku.edu](mailto:david.keeling@wku.edu)) – 5-4555

1. Identification of course:
  - 1.1 Current course prefix (subject area) and number: GEOL 486
  - 1.2 Course title: Senior Environmental Seminar
  - 1.3 Credit hours: 3
2. Rationale for the course suspension: Not offered for several years. The Department plans to reactivate this course in the future when new faculty are appointed with expertise in this area.
3. Effect of course suspension on programs or other departments, if known:  
None known.
4. Proposed term for implementation:                      Fall 2010
5. Dates of prior committee approvals:

Geography and Geology Department	<u>4/23/2010</u>
Ogden College Curriculum Committee	<u>5/06/10</u>
Undergraduate Curriculum Committee	<u>                    </u>
University Senate	<u>                    </u>

Attachment: Course Inventory Form

Proposal Date: 4/23/2010

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

Contact Person: David Keeling ([david.keeling@wku.edu](mailto:david.keeling@wku.edu)) – 5-4555

1. Identification of course:
  - 1.1 Current course prefix (subject area) and number: GEOL 490
  - 1.2 Course title: Petroleum Geology
  - 1.3 Credit hours: 3
2. Rationale for the course suspension: Not offered for several years. The Department plans to reactivate this course in the future when new faculty are appointed with expertise in this area.
3. Effect of course suspension on programs or other departments, if known:  
None known.
4. Proposed term for implementation:                      Fall 2010
5. Dates of prior committee approvals:

Geography and Geology Department	<u>4/23/2010</u>
Ogden College Curriculum Committee	<u>5/06/10</u>
Undergraduate Curriculum Committee	<u>                    </u>
University Senate	<u>                    </u>

Attachment: Course Inventory Form



Proposal Date: 4/14/10

Odgen College of Science and Engineering  
Department of Geography and Geology  
Proposal to Revise Course Prerequisites  
(Consent Item)

Contact Person: Jun Yan e-mail: jun.yan@wku.edu Phone: -55982

1. Identification of course:
  - 1.1 Course prefix (subject area) and number: GEOG 419
  - 1.2 Course title: GIS Applications Development
  - 1.3 Credit hours: 3

2. Current prerequisites:

GEOG 417 and CS 230

3. Proposed prerequisites:

GEOG 317, and CS 230 or CS 170

4. Rationale for the revision of prerequisites:

*Replacing GEOG 417 with GEOG 317:* GEOG 419 covers GIS programming while GEOG 417 covers GIS analysis. No critical GIS skills and knowledge from GEOG 417 are needed for successful completion of GEOG 419. As a prerequisite for GEOG 417, GEOG 317 covers the basic concepts, principles, and skills in GIS and therefore should be the appropriate prerequisite for GEOG 419.

*Replacing CS 230 with CS230 or CS170:* ArcGIS Desktop, the main teaching GIS software at WKU, is undergoing a major change in its architecture, especially in the area of programming and customization. It is expected in a few years that it will replace the current macro language VB/VBA (CS 230 includes VB. Net) with Python (included in CS 170). The proposed change will accommodate this shift so WKU graduates will be better prepared for the GIS job market.

5. Effect on completion of major/minor sequence:

By changing the prerequisite from GEOG 417 to GEOG 317, students could take GEOG 417 and 419 during the same semester and thus shorten the time required to earn the GIS Certificate from 2 years to 1.5 years. Students majoring in GIScience will also benefit from this change as well.

6. Proposed term for implementation: Fall 2010

7. Dates of prior committee approvals:

Geography and Geology Department: 4/23/10

OCSE Curriculum Committee 5/06/10

Undergraduate Curriculum Committee \_\_\_\_\_

University Senate \_\_\_\_\_

Attachment: Course Inventory Form

Proposal Date: 4/14/10

Odgen College of Science and Engineering  
Department of Geography and Geology  
Proposal to Revise a Program  
(Action Item)

Contact Person: Jun Yan   e-mail: jun.yan@wku.edu   Phone: -55982

1. Identification of program:
  - 1.1 Current program reference number: 576
  - 1.2 Current program title: Geographic Information Science
  - 1.3 Credit hours: 57

2. Identification of the proposed program changes:

Two curriculum revisions:

- 1). In GIS Foundation Courses – replace CS 230 with CS 170
- 2). In Required Support Courses – replace CS 240 with CS 180

3. Detailed program description:

Required Courses	57 hours	Required Courses	57 hours
AMS 163	3	AMS 163 Architectural Drafting	3
CS 145	3	CS 145 Intro Computing	3
CS 230	3	CS 170 Intro Programming	3
Geog 100 or Geol 102	3	Geog 100 or Geol 102 Physical Science	3
Geog 101 or Geog 110	3	Geog 101 or Geog 110 Cultural Science	3
Geog 300	3	Geog 300 Research Methods	3
Geog 316	4	Geog 316 Fundamentals of GIS	4
Geog 317	3	Geog 317 GIS	3
Geog 391	3	Geog 391 Data Analysis	3
Geog 414	4	Geog 414 Remote Sensing	4
Geog 417	3	Geog 417 GIS Analysis	3
Geog 418	3	Geog 418 Internet GIS	3
Geog 419	3	Geog 419 GIS Applications	3
Geog 443	3	Geog 443 GIS Databases	3
Geog 475 or Geog 495	6	Geog 475 or Geog 495 Internship	6
Geog 477	3	Geog 477 Special Topics in GIS	3
Geog 492	3	Geog 492 Advanced Spatial Analysis	3
Geog 499	1	Geog 499 Professional Development	1

Additional Courses	20 hours	Additional Courses	21 hours
CE 160/161	4	CE 160//161 Surveying	4
CS 240	3	CS 180 Computer Science 1	4
Math 116	3	Math 116 Algebra	3
Math 117	3	Math 117 Trigonometry	3
Math 136	4	Math 136 Calculus I	4
Eng 307	3	Eng 307 Technical Writing	3

4. Rationale for the proposed program change:

1). In GIS Foundation Courses – replace CS 230 with CS 170: ArcGIS Desktop, the main teaching GIS software at WKU, is undergoing a major change in its architecture, especially in the area of programming and customization. It is expected in a few years that it will replace its current macro language VB/VBA (CS 230 includes VB. Net) with Python (included in CS 170). This change will accommodate this shift so WKU graduates will be better prepared for the GIS job market.

2). In Required Support Courses – replace CS 240 with CS 180: Department of Mathematics and Computer Science recently changed the course number of CS 240 to CS 180 and increase its credit hours from 3 to 4.

5. Proposed term for implementation and special provisions (if applicable):

Fall 2010

6. Dates of prior committee approvals:

Geography and Geology Department: 4/23/10

OCSE Curriculum Committee 5/06/10

Undergraduate Curriculum Committee \_\_\_\_\_

University Senate \_\_\_\_\_

Attachment: Program Inventory Form

Proposal Date: 4/2/2010

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

Contact Person: Greg Goodrich, gregory.goodrich@wku.edu, 5-5986

1. Identification of program:
  - 1.1 Current program reference number: 269
  - 1.2 Current program title: A.S. Degree in Meteorological Technology
  - 1.3 Credit hours: 24
2. Identification of the proposed program changes:
  - CS 170 (Problem Solving and Programming) will be added as an option for the concentration requirement that currently includes CS 230 (Introduction Programming: Basic).
3. Detailed program description:

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ORIGINAL PROGRAM

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Concentration Requirements

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**GEOG 121**

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GEOG 122 or GEOG 222

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GEOG 325

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**GEOG 422**



MATH 136

CS 230

PHYS 201

Additional Requirements

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General Education

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University Electives

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4. Rationale for the proposed program change:

The above revision reflects the addition of a second introductory programming course proposed by the Department of Mathematics and Computer Science. A.S. Met Tech students who plan to continue with the B.S. Degree in Meteorology will choose CS 170, which is a pre-requisite for higher-level programming courses required by the Meteorology major. A.S. Met Tech students who plan to pursue a GIS Minor or certificate will choose CS 230, which is a pre-requisite for higher-level GIS courses.

5. Proposed term for implementation and special provisions (if applicable):

Fall 2010 will be the date of implementation.

6. Dates of prior committee approvals:

Department of Geography and Geology: 4/23/2010

Ogden Curriculum Committee 5/06/10

Undergraduate Curriculum Committee \_\_\_\_\_

University Senate \_\_\_\_\_

Attachment: Program Inventory Form

Proposal Date 3/5/2010

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

Contact Person: Zhonghang Xia e-mail: zhonghang.xia@wku.edu Phone: 745-6459  
Huanjing Wang e-mail: huanjing.wang@wku.edu Phone: 745-2672

1. Identification of proposed course

1.1 Prefix and number: CS 243

1.2 Title: Introduction to Database Systems

1.3 Abbreviated title: Intro to Database

1.4 Credit hours and contact hours: 3 credit hours and 3 contact hours

1.5 Type of course: C (Lecture/Lab)

1.6 Prerequisites: CS 181

1.7 Catalog course listing:

An introduction to relational database management systems and their applications, including the essential skills and methods for the design, development, and implementation of database systems.

2. Rationale

2.1 Reason for developing the proposed course:

Computer systems which require formal databases continue to grow in importance. The only current database course in our department is offered at the 400-level. So most students take it in their final year. Consequently, they are often behind in the development of what has become core CS knowledge. It is desirable for students to have an introduction to database skills and applications as early as possible.

## 2.2 Projected enrollment in the proposed course:

The estimated demand for this course is one section of 20-40 students per year.

## 2.3 Relationship of the proposed course to courses now offered by the department:

The existing database course CS 443 covers many theoretical topics, such as relational algebra, transaction management, consistency maintenance, and database recovery. CS 243 will focus more on more elementary database concepts and skills and promote understanding of the connections between data, databases and web applications.

## 2.4 Relationship of the proposed course to courses offered in other departments:

CIT offers Database Administration I (CIT 350) and Database Administration II (CIT 352). They focus on database applications for business use.

## 2.5 Relationship of the proposed course to courses offered in other institutions:

The Computer Science program at Western Kentucky University will follow the same accreditation standards and model curriculum guidelines as other Computer Science programs in the U.S. The University of Iowa offers 22C144 "Database Systems". Other schools that offer such courses include the University of California, Santa Cruz (CMPS 182: Introduction to Database Management Systems) and San Jose State University (CS 157A Database Management Systems I).

# 3. Discussion of proposed course

## 3.1 Course objectives:

Students are expected to:

- Understand the fundamental concepts and theories of databases and information systems which incorporate them.
- Become familiar with the techniques of data organization and access in a database environment.
- Understand the general process of database design and development.

## 3.2 Content outline:

- Fundamental concepts in databases and information systems
- Entity-relationship models (E-R) and modeling
- Relational data models and constraints
- Comparisons of data organization models
- Database language SQL and associated programming techniques
- Client/server environment and web database programming

- Database authorization and security issues

3.3 Student expectations and requirements:

Course grades will be determined by student performance on class activities, projects, assignments and examinations.

3.4 Tentative texts and course materials:

Modern Database Management, 9th Edition (2008), by Jeffrey A. Hoffer, Mary B. Prescott, and Fred R. McFadden.

4. Resources

4.1 Library resources: Present library holdings are sufficient.

4.2 Computer resources: University computing resources are sufficient.

5. Budget implications

5.1 Proposed method of staffing: The present number of Computer Science faculty is sufficient.

5.2 Special equipment needed: None.

5.3 Expendable materials needed: None.

5.4 Laboratory supplies needed: None.

6. Proposed term for implementation: Spring 2011

7. Dates of prior committee approvals:

Mathematics & Computer Science      April 28, 2010

Ogden College Curriculum Committee      May 6, 2010

University Curriculum Committee      \_\_\_\_\_

University Senate      \_\_\_\_\_

Proposal Date: March 9, 2010

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

Contact Person: Huanjing Wang, [huanjing.wang@wku.edu](mailto:huanjing.wang@wku.edu), 745-2672  
Zhonghang Xia, [zhonghang.xia@wku.edu](mailto:zhonghang.xia@wku.edu), 745-6459

1. Identification of proposed course:

- 1.1 Course prefix (subject area) and number: CS 296
- 1.2 Course title: Intermediate Software Project
- 1.3 Abbreviated course title: Intermediate Project
- 1.4 Credit hours and contact hours: 3
- 1.5 Type of course: C (Lecture/Lab)
- 1.6 Prerequisites: CS 243
- 1.7 Course catalog listing:

The course enhances each student's abilities to craft software through the development of a significant group project which requires a variety of skills. Topics include simple data analysis and design, group problem solving, human-computer interface design, software project management, security, and quality control. The technical work will be complemented by written and oral technical presentations.

2. Rationale:

2.1 Reason for developing the proposed course:

Feedback from students and faculty indicates that students have difficulty applying their knowledge to real-world work in their early study stage. The course is intended to give students a context for, and an introduction to, a wide variety of skills. These are developed more completely in specialized upper-level CS courses.

2.2 Projected enrollment in the proposed course:

One session per year; 20-30 students per year

2.3 Relationship of the proposed course to courses now offered by the department:

Computer Science has a course CS 476 Research Methods and Projects in



Computer Science for senior-level students.

2.4 Relationship of the proposed course to courses offered in other departments:

Each of the Engineering specialties has an analogous course with comparable objectives: to give students an early opportunity to practice the integration of professional skills before they meet the intense requirements of a senior project.

2.5 Relationship of the proposed course to courses offered in other institutions:

Oakland University offers CS 281, Sophomore Project.

3. Discussion of proposed course:

3.1 Course objectives:

Students will gain experience in the over-all design and implementation of a software “system” through development of a team-based project. They will integrate knowledge from early technical courses with material from more advanced topics introduced through lectures given in this class. They will gain experience working in groups, and in making written and oral presentations.

3.2 Content outline:

- Project specification
- Task and project management
- Data analysis and design
- Human-computer interface design
- Software testing, quality control and security

3.3 Student expectations and requirements:

Students are expected to attend class regularly and to complete any individual assignments made.

They are expected to participate actively in a group project and to help carry the project through to completion.

Students are expected to present their work periodically during the course, in both written and oral form.

3.4 Tentative texts and course materials:

Software Project Management: A Real-World Guide to Success  
Joel Henry

Addison-Wesley, 2004  
ISBN-13: 9780201758658

Ship it! A Practical Guide to Successful Software Projects  
J. Richardson and W. Gwaltney Jr.  
the Pragmatic Bookshelf, 2005  
ISBN-10: 0974514047

4. Resources:
  - 4.1 Library resources:  
None
  - 4.2 Computer resources:  
Existing computer lab
5. Budget implications:
  - 5.1 Proposed method of staffing:  
Existing faculty
  - 5.2 Special equipment needed:  
None
  - 5.3 Expendable materials needed:  
None
  - 5.4 Laboratory materials needed:  
None
6. Proposed term for implementation: Spring 2011
7. Dates of prior committee approvals:

Mathematics & Computer Science      April 28, 2010

Ogden College Curriculum Committee      May 06, 2010

University Curriculum Committee      \_\_\_\_\_

University Senate      \_\_\_\_\_

Attachment: Bibliography, Library Resources Form, Course Inventory Form

Proposal Date: 09 April 10

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

Contact Person: Julie Ellis [julie.ellis@wku.edu](mailto:julie.ellis@wku.edu) 270.745.6394

1. Identification of proposed course:

- 1.1 Course prefix (subject area) and number: ENGR 175
- 1.2 Course title: University Experience – Engineering
- 1.3 Abbreviated course title: Univ Experience - ENGR
- 1.4 Credit hours and contact hours: 1 credit hour, 1 contact hour
- 1.5 Type of course: L, Lecture
- 1.6 Prerequisites/corequisites: MATH116 or eligibility for higher math course
- 1.7 Course catalog listing:

*For beginning college freshmen or transfer students with fewer than 24 semester hours of credit.* Transition to university experience for engineers. Topics include study skills, critical thinking, information literacy, exploration of engineering majors and careers, campus resources, effective teamwork skills, and basic computer tools regularly used by engineering students. Engineering design processes and practices are introduced.

2. Rationale:

2.1 Reason for developing the proposed course:

For some time, each engineering program (civil, electrical and mechanical) has had its own introductory course (CE175, EE175, ME175) presenting the basic topics of University Experience in a context specific to each engineering discipline. These courses have the structure of one lecture session plus one lab session each week.

The proposed course unifies the lecture topics into a single one-credit lecture course for all three engineering programs. This course is complementary to a separate one-credit lab course for each program. The lab courses EE101 and ME176 already exist; CE176 will be proposed in the near future.

The proposed structure allows for greater flexibility for students scheduling their first engineering courses, with anticipated improvements both in instructional efficiency and in student success and retention. A collateral benefit from combining the lecture sessions is increasing student awareness of all three engineering disciplines. This adds breadth to each student's preparation as well as decision support for the student who has decided to study engineering but is still

unsure which program presents the best fit.

2.2 Projected enrollment in the proposed course:

Approximately 100 students in the fall (two sections) and 50 in the spring (one section).

2.3 Relationship of the proposed course to courses now offered by the department:

See section 2.1 above. This course is a partial replacement for CE175, EE175, and ME175. It is complementary to EE101 and ME176, which are currently taken by transfer students and students choosing an engineering major after accumulating 24 credits or more.

Currently the introductory engineering experience is either a two-credit course (CE175, EE175, ME175) taken by first-time freshmen or a one-credit lab course (CE176, EE101, ME176) taken by transfers. This course will change that experience to this one-credit course common to all engineering programs plus the one-credit lab course for the student's major. The courses will be scheduled so that a student can take ENGR175 and the program-specific lab course during the same semester or in two separate semesters.

2.4 Relationship of the proposed course to courses offered in other departments:

Many of the topics covered in this course are also covered in the University Experience course (UE175). The difference is that the readings and assignments here are focused on engineering students, engineering study, and the engineering profession.

If an engineering student chooses to take UE175, ENGR175 will not be required, but the program-specific lab course will be required.

2.5 Relationship of the proposed course to courses offered in other institutions: Many engineering curricula include some form of the Introduction to Engineering course, combining student success skills, overview of the majors and the profession, and early experience in doing the work of engineering students via simple projects. Our arrangement is somewhat unique in giving students both exposure to the range of engineering disciplines and experience in a program-specific lab course.

3. Discussion of proposed course:

3.1 Course objectives:

- Students will learn about and practice skills that characterize a successful engineering student
- Students will deepen their understanding of engineering as a field of university study and as a profession.

3.2 Content outline:

- The engineering profession
- Success skills as an engineering student
- Resources at WKU
- Problem solving
- Critical thinking
- Computer tools for engineers
- Teamwork
- Design
- Communication
- Ethics for engineers
- Educational project experience

3.3 Student expectations and requirements: Evaluation will be based on observed behaviors (such as attendance and performance on student teams), short homework problem sets, preparation of work products such as spreadsheets, a research report, and simple presentations of technical material, and reflective writing on engineering topics and each student's own learning experiences.

3.4 Tentative texts and course materials:

*Engineering Your Future*, Oakes, Leone, and Gunn. Great Lakes Press. Latest edition 2009-2010.

Web resources will include the National Academy of Engineering's presentation of the Engineering Grand Challenges <http://www.engineeringchallenges.org/>

4. Resources:

4.1 Library resources: Nothing beyond existing resources

4.2 Computer resources:  
Nothing beyond existing resources

5. Budget implications:

5.1 Proposed method of staffing: Regular faculty will be assigned as part of the standard workload.

5.2 Special equipment needed: None

5.3 Expendable materials needed: None

5.4 Laboratory materials needed: None

6. Proposed term for implementation: Spring 2011

7. Dates of prior committee approvals:

Engineering Department/Division: April 30, 2010

Ogden Curriculum Committee May 6, 2010

Undergraduate Curriculum Committee \_\_\_\_\_

University Senate \_\_\_\_\_

Attachment: Bibliography, Library Resources Form, Course Inventory Form

Proposal Date: February 10, 2010

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

Contact Person: Melanie Autin, melanie.autin@wku.edu, 745-6171

1. Identification of course:
  - 1.1 Current course prefix (subject area) and number: MATH 203
  - 1.2 Course title: Statistics
  - 1.3 Credit hours: 3
2. Revise course title:
  - 2.1 Current course title: Statistics
  - 2.2 Proposed course title: Introductory Statistics
  - 2.3 Proposed abbreviated title: Introductory Statistics
  - 2.4 Rationale for revision of course title: Since statistics is a broad area of study, the current course title is not specific enough to identify this course. The title Introductory Statistics indicates that this is an elementary, non-calculus-based statistics course. For a student whose major department requires a discipline-specific course in statistics and/or data analysis, MATH 183 provides an introduction to the basic concepts of statistics, thereby allowing the major departments' courses to focus in greater depth on applications in their fields. For other students, MATH 183 provides the background for processing statistical information encountered in everyday situations.
3. Revise course number:
  - 3.1 Current course number: 203
  - 3.2 Proposed course number: 183
  - 3.3 Rationale for revision of course number: Because this is an introductory course, its number will be changed to the 100-level without changing the course content. In addition, the department is adopting a numbering system for its courses in which the tens digit indicates the specific mathematical area of the course. The numbers 80-89 are for probability/statistics courses.
4. Revise course prerequisites/corequisites/special requirements:
  - 4.1 Current prerequisites: MATH 116 or MATH 118 or permission of instructor
  - 4.2 Proposed prerequisites: Eligibility for College Algebra based on Math ACT or MPE scores, or DMA 096C with a grade of C or better
  - 4.3 Rationale for revision of course prerequisites:

College algebra is not needed for success in this course. The new prerequisite



should provide students with adequate mathematical preparation.

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

5. Proposed term for implementation: Fall 2011

6. Dates of prior committee approvals:

Department of Mathematics and Computer Science 2/26/2010

OCSE Curriculum Committee 4/01/2010

Professional Education Council 4/14/10

General Education Committee \_\_\_\_\_

Undergraduate Curriculum Committee \_\_\_\_\_

University Senate \_\_\_\_\_

Attachment: Course Inventory Form