

**UNIVERSITY CURRICULUM COMMITTEE
WESTERN KENTUCKY UNIVERSITY**

REPORT TO THE SENATE:

DATE: 19 February
FROM: Beth Plummer, Chair

The University Curriculum Committee submits the following items from the 22 January meeting for approval by the University Senate:

Information Item Report:

1. Create a Temporary Course: DH 360 International Health and Human Service Learning Program, Belize
2. Revise Prerequisites/Corequisites: CFS 395 Child and Family Stress
3. Revise Prerequisites/Corequisites: CFS 497 Family Home Visiting
4. Revise Prerequisite: CFS 299 Administration of Early Childhood Programs
5. Revise Prerequisite: PH 456 Independent Study
6. Revise Prerequisite: JOUR 301 Press Law and Ethics
7. Revise Course Catalog Listing: RELS 102 Introduction to Religious Studies
8. Revise a Catalog Course Listing: PH 100 Personal Health
9. Revise a Catalog Course Listing: SFTY 270 General Safety
10. Revise a Catalog Course Listing: HCA 340 Health Care Organization and Management
11. Revise a Catalog Course Listing: HCA 343 Quality Management for Healthcare
12. Revise a Catalog Course Listing: ENV 360 Air Pollution Control
13. Revise a Catalog Course Listing: ENV 365 Air Pollution Control and Laboratory
14. Revise a Catalog Course Listing: PH 365 Human Sexuality
15. Revise a Catalog Course Listing: PH 384 Introduction to Epidemiology
16. Revise a Catalog Course Listing: HCA 440 Health Economics
17. Revise a Catalog Course Listing: PH 443 Health Problems the of Aged
18. Revise a Catalog Course Listing: PH 461 Comprehensive School Health Program
19. Revise a Catalog Course Listing: PH 490 Internship
20. Delete a Course : EDFN 270, Honors Social & Philosophical Issues in Education
21. Delete a Course: EXED 491, Lecture in Lieu of Student Teaching
22. Suspend Course: ENG 319 Teaching Language in the Grades
23. Revise course title: HIM 220C Statistical Applications in Health Information Management
24. Revise course title:HIM 221C Health Information Management & Organization
25. Revise a program: Health Information Management
26. Suspend Program (Minor): 496 English Writing Minor

Consent Agenda Report:

College of Education and Behavioral Science (p. 32)

1. Create a New Course: SMED 210, Knowing and Learning in Mathematics & Science
2. Create a New Course: SMED 320, Classroom Interactions
3. Create a New Course: SMED 340, Perspectives on Mathematics and Science
4. Create a New Course: SMED 360, Research Methods for Math and Science Teachers
5. Create a New Course: SMED 470, Project-Based Instruction

6. Create a New Course: SMED 489, SMED Student Teaching Seminar
7. Create a New Major Program: Science and Mathematics Education

College of Health and Human Services (p. 59)

1. Revise a Certificate Program: Family Home Visiting Certificate:
2. Create a New Course: DH 360 International Health and Human Service Learning Program
3. Multiple Revisions to a Course: PH 444 Death Education
4. Multiple Revisions to a Course: PH 468 Sexuality Education
5. Multiple Revisions to a Course: PH 484 Community Organization for Health Education

Potter College of Art (p. 69)

1. Revise Credit Hours: ENG 299 Introduction to English Studies
2. Create Course: RELS 496 Senior Seminar
3. Revise Program: 769 Religion (Major)
4. Revise Program: 447 Religion (Minor)
5. Create Program Professional Writing (Minor)

University College (p. 78)

1. Create a New Course: LEAD 325 Leading Change
2. Create a New Course: LEAD 330 Leadership Ethics and Decision-Making
3. Create a New Course: LEAD 395 Contemporary Leadership Issues

Ogden College of Science and Engineering (p. 85)

1. Multiple Revisions to a Course: CS 442, Data Structures
2. Create a New Course: MATH 205, Number Systems and Number Theory to Teachers
3. Create a New Course: MATH 206, Fundamentals of Geometry for Teachers
4. Create a New Course: MATH 304, Functions, Applications, and Explorations
5. Create a New Course: MATH 308, Rational Numbers and Data Analysis for Teachers
6. Create a New Course: MATH 490, Seminar in Middle Grades Mathematics
7. Proposal to Revise a Program: Ref. #533, Construction Management
8. Proposal to Revise a Program: Ref. #525, Major in Biology
9. Proposal to Revise a Program: Ref. #617, Major in Biology (with minor)
10. Proposal to Revise a Program: Ref. #728, Mathematics
11. Proposal to Create a New Major Program: Middle Grades Mathematics, BS

Proposal Date: November 17, 2008

**College of Health and Human Service
Department of Allied Health
Proposal to Create a Temporary Course
(Information Item)**

Contact Person: Rebecca G. Tabor, becky.tabor@wku.edu , 745-3814/Daniel Carter, daniel.carter@wku.edu 745-2633

1. Identification of proposed course

- 1.1 Course prefix (subject area) and number: DH 360
- 1.2 Course title: International Health and Human Service Learning Program, Belize
- 1.3 Abbreviated course title: IHHSL, Belize
- 1.4 Credit hours: 3
- 1.5 Schedule type: Winter Term
- 1.6 Prerequisites/corequisites: None
- 1.7 Course description: The purpose of this study abroad/service-learning course is to enhance student learning through the integration of academic and co-curricular experiences. This will be accomplished with active service to community partners, while encouraging civic engagement, community awareness, interdisciplinary teamwork and personal leadership development

2. Rationale

- 2.1 Reason for offering this course on a temporary basis: This course is needed to accommodate dental hygiene students planning to study abroad during Winter Term 2009. A permanent course proposal will be submitted.
- 2.2 Relationship of the proposed course to courses offered in other academic units: A similar course will be offered through Nursing and Public Health

3. Description of proposed course

- 3.1 Course content outline
 - a. Introduction to Service Learning in Belize
 - Introduction
 - Mission
 - Objectives
 - What is Service Learning?
 - What is Reflective Learning?
 - Belize
 - b. Student Orientation
 - Belize
 - Program History
 - Belize 2008 Handbook
 - Characteristics of an Effective Team
 - Travel Conduct
 - Travel I.Q.
 - Travel Health Information
 - What to Bring
 - Frequently Asked Questions

- c. Service Learning in Belize
 - Service Learning Projects
 - Dental Examinations
 - Dental Prophylaxis
 - Sealant/Varnish Application
 - Community Health Problems
 - Interaction with other disciplines
 - Itinerary
 - Accommodations
 - Daily Events
- d. Student Evaluation
 - Daily Reflections Journal
 - Service Learning Participation
 - Final Report
- e. Post-Belize Reflection Discussions
 - What were your observations while in Belize?
 - What did you learn from the experience?
 - How will this new learning experience benefit you personally or your discipline/field?
 - What are you going to do in the future, related to service learning?
 - What aspect of the service learning experience can be improved?
 - What aspect of the service learning experience did you like?

3.2 Tentative text(s) – **Belize 2009 Handbook**

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

- 4.1 Reason for offering this course a second time on a temporary basis: Forms are being submitted to make this course a permanent offering.
- 4.2 Term course was first offered: Winter Term 2008
- 4.3 Enrollment in first offering: 3

5. Term of Implementation: Winter 2009

6. Dates of review/approvals:

Allied Health Department: 11-17-08

CHHS Undergraduate Curriculum Committee 11/21/2008

CHHS Dean 11-17-08

UCC Chair _____

Provost: _____

Attachment: Course Inventory Form

Proposal Date: September 9, 2008

**College of Health and Human Services
Department of Consumer & Family Sciences
Proposal to Revise Course Prerequisites
(Consent Item)**

Contact Person: Darbi Haynes-Lawrence, Darbi.Haynes-Lawrence@wku.edu, 745-2525

1. Identification of course:

- 1.1 Course prefix (subject area) and number: CFS 395
- 1.2 Course title: Child and Family Stress
- 1.3 Credit hours: 3

2. Current prerequisites: CFS 292 and CFS 311

3. Proposed prerequisites: Junior standing or permission of instructor

4. Rationale for the revision of prerequisites:

CFS 292 and CFS 311 are not required in the Child Studies minor. CFS 395 is required in the minor. Having a pre-req of CFS 292 and CFS 311 for a course required in the minor will slow the progression through the minor. The content in CFS 292 is also not relevant to the CFS 395 course. A theory taught in CFS 311 (Family Systems Theory) will be reviewed in CFS 395; thus prior knowledge of it is not necessary to successfully complete CFS 395.

5. Effect on completion of major/minor sequence:

The pre-requisites of CFS 292, (Diversity in Early Childhood Programs) and CFS 311 (Family Relations) are not necessary in order to prepare students to take this course.

6. Proposed term for implementation: Summer, 2009

7. Dates of prior committee approvals:

Consumer and Family Science Department: 11/3/2008

CHHS Undergraduate Curriculum Committee 11/21/2008

Undergraduate Curriculum Committee 01/22/09

University Senate

Attachment: Course Inventory Form

Proposal Date: November 3, 2008

**College of Health and Human Services
Department of Consumer & Family Sciences
Proposal to Revise Course Prerequisites
(Consent Item)**

Contact Person: Darbi Haynes-Lawrence, Darbi.Haynes-Lawrence@wku.edu, 745-2525

1. Identification of course:

- 1.1 Course prefix (subject area) and number: CFS 497
- 1.2 Course title: Family Home Visiting
- 1.3 Credit hours: 3

2. Current prerequisites: CFS 311 & CFS 492

3. Proposed prerequisites: CFS 395 or CFS 494 or permission of instructor.

4. Rationale for the revision of prerequisites:

The purpose of this class is to educate students on home visiting; the purpose and importance, and the experience of conducting them. CFS 497 is the capstone course for the Family Home Visiting certificate. CFS 311 and CFS 492 are not required in this certificate. Having a pre-requisite of CFS 311 and CFS 492 will slow the progression through the certificate. This will negatively affect many of the populations for which this certificate was designed.

5. Effect on completion of major/minor sequence:

The pre-requisites listed, CFS 311 and 492 are not necessary in order to prepare students to take this course. The content examined in both of those courses will not affect the successful completion of CFS 497. CFS 497 is the capstone course for the Family Home Visiting certificate. This certificate is made up of four classes: CFS 395 (Child and Family Stress), CFS 494 (Parenting Strategies), a class (proposal in curriculum process) agreed upon between the student and the advisor for the Family Home Visiting Certificate, and finally, the capstone to the certificate, CFS 497 (Family Home Visiting). Family Systems Theory (reviewed in CFS 311) and Family Stress Theory will both be thoroughly covered in CFS 395, which is a required course in the Family Home Visiting Certificate. Thus, removing CFS 311 will not impact the students in a negative manner. Child development is imbedded in all these courses, therefore removing CFS 492 will not impact the students negatively, either.

6. Proposed term for implementation: Summer 2009

7. Dates of prior committee approvals:

Consumer and Family Sciences Department: 11/3/08

CHHS Undergraduate Curriculum Committee: 11/21/2008

Undergraduate Curriculum Committee 01/22/09

University Senate _____

Attachment: Course Inventory Form

November 20, 2008

**College of Health and Human Services
Department of Consumer and Family Sciences
Proposal to Revise Course Prerequisites
(Consent Item)**

Contact Person: Janet Fugate, Janet.fugate@wku.edu, 745-4613

- 1 Identification of course:
 - 1.1 Course prefix (subject area) and number: CFS 299
 - 1.2 Course title: Administration of Early Childhood Programs
 - 1.3 Credit hours: 3 credit hours
- 2 Current prerequisites: CFS 295, CFS 296, or permission of instructor
- 3 Proposed prerequisites: CFS 294, or permission of the instructor.
- 4 Rationale for the revision of prerequisites: Students in the revised Child Studies concentration no longer are required to take CFS 295: Curriculum Development for Infants and Toddlers or CFS 296: Curriculum Development for Preschool and Kindergarten. They are required to take CFS 294: Assessment of Young Children. In the IECE two year program CFS 294 will provide a foundation for success in CFS 299.
- 5 Effect on completion of major/minor sequence: This will not affect the sequence of the program.
- 6 Proposed term for implementation: Summer 2009
- 7 Dates of prior committee approvals:

CFS Department/Division:	12/1/08
CHHS Undergraduate Curriculum Committee	1/6/2009
Undergraduate Curriculum Committee	01/22/09
University Senate	_____

Attachment: Course Inventory Form

Proposal Date: 12/5/2008

**College of Health and Human Services
Department of Public Health
Proposal to Revise Course Prerequisites
(Consent Item)**

Contact Person: Gary English, gary.english@wku.edu, 5-2678

1. Identification of course:
 - 1.1 Course prefix and number: PH 456
 - 1.2 Course title: Independent Study
 - 1.3 Credit hours: 3
2. Current prerequisites: PH 381 and permission of instructor
3. Proposed prerequisites: Jr. Standing and permission of the instructor
4. Rationale for the revision of prerequisites: PH 381 is not necessary for students to have completed before taking PH 456.
5. Effect on completion of major/minor sequence: None
6. Proposed term for implementation: Fall 2009
7. Dates of prior committee approvals:

Public Health Department/Division:	12-5-2008
CHHS Undergraduate Curriculum Committee	1/6/2009
Undergraduate Curriculum Committee	01/22/09
University Senate	_____

Attachment: Course Inventory Form

Proposal Date: Oct. 23, 2008

**Potter College
School of Journalism & Broadcasting
Proposal to Make Revision to a Course
(Action Item)**

Contact Person: Mac McKerral 745-5882 mac.mckerral@wku.edu

1. Identification of course:

- 1.1 Current course prefix (subject area) and number: JOUR 301
- 1.2 Course title: Press Law and Ethics
- 1.3 Credit hours: 3

2. Revise course title: N/A

3. Revise course number: N/A

4. Revise course prerequisites/corequisites/special requirements:

- 4.1 Current prerequisites/corequisites/special requirements:
Prerequisite: Junior standing or approval of instructor
- 4.2 Proposed prerequisites/corequisites/special requirements:
Prerequisite: JOUR 201, 202 and junior standing, or permission of instructor.
- 4.3 Rationale for revision of course prerequisites/corequisites/special requirements: When the “junior standing” change was made in spring 2008, the completion of JOUR 201 and JOUR 202 inadvertently was dropped.
- 4.4 Effect on completion of major/minor sequence: None

5. Revise course catalog listing: N/A

6. Revise course credit hours: N/A

7. Proposed term for implementation: Fall 2009

8. Dates of prior committee approvals:

School of Journalism & Broadcasting	<u>10/24/08</u>
Potter College of Arts & Letters	<u>12/408</u>
Undergraduate Curriculum Committee	01/22/09
University Senate	_____

Attachment: Course Inventory Form

Proposal Date: August 20, 2008

**Potter College of Arts & Letters
Department of Philosophy and Religion
Proposal to Revise Course Catalog Listing
(Consent Item)**

Contact Person: Eric Bain-Selbo, eric.bain-selbo@wku.edu, x55744

1. Identification of course:

- 1.1 Course prefix (subject area) and number: RELS 102
- 1.2 Course title: Introduction to Religious Studies
- 1.3 Credit hours: 3

2. Current course catalog listing:

An introduction to religious studies providing methodological bridges between traditions and addressing major beliefs, ethical practices, symbols, and social institutions of several religions.

3. Proposed course catalog listing:

An introduction to the study of religion from Western and non-Western cultures. The course surveys and critiques definitions of religion and examines topics such as the historical, social, psychological, and ethical implications of a number of religious traditions.

4. Rationale for revision of the course catalog listing:

The proposed course catalog listing more accurately reflects the way the course will be taught and the intentions of the religious studies faculty.

5. Proposed term for implementation : 200930

6. Dates of prior committee approvals:

Religious Studies Program	August 25, 2008
Department of Philosophy and Religion	September 10, 2008
Potter College Curriculum Committee	December 4, 2008
Undergraduate Curriculum Committee	01/22/09
University Senate	

Attachment: Course Inventory Form

**College Of Health and Human Services
Department of Public Health
Proposal to Revise Course Catalog Listing
(Consent Item)**

Proposal Date: 12/5/2006

Contact Person: Gary English, gary.english@wku.edu, 5-2678,

1. Identification of course:

- 1.1 Course Prefix and number: PH 100
- 1.2 Course Title: Personal Health
- 1.3 Credit Hours: 3

2. Current course catalog listing:

Personal health problems of students are emphasized and factors influencing behavior related to health in our complex society are explored. The major purpose is for the students to assess their individual behavior in light of current scientific knowledge concerning mental health, drugs, alcohol and tobacco; health care; selection of health products; prevention of disease; nutrition; exercise, rest and relaxation.

3. Proposed course catalog listing:

Examines behaviors and environmental conditions that enhance or hinder an individual's health status. In addition to exploring social and environmental factors, students are encouraged to think critically about behavioral choices that impact one's health. Students assess their individual behavior in the light of current scientific knowledge concerning mental health; drugs, alcohol and tobacco; health care; selection of health products; prevention of disease; nutrition; exercise, and stress management.

4. Rationale for revision of the course catalog listing:

Revision to the course catalog listing is to accurately reflect course content.

5. Proposed term for implementation: Fall 2009

6. Dates of prior committee approvals:

Department of Public Health	December 5, 2008
CHHS Undergraduate Curriculum Committee	__1/6/2009__
General Education Committee	__1/15/2009__
Undergraduate Curriculum Committee	01/22/09
University Senate	_____

Attachment: Course Inventory Form

**College of Health and Human Services
Department of Public Health
Proposal to Revise Course Catalog Listing
(Consent Item)**

Proposal Date: 12/5/2008

Contact Person: Gary English, gary.english@wku.edu, 5-2678

1. **Identification of course:**

- 1.1 Course Prefix and number: SFTY 270
- 1.2 Course Title: General Safety
- 1.3 Credit Hours: 3

2. **Current course catalog listing:**

Complete analysis of causes and prevention of accidents with an emphasis on analysis and hazard recognition. Major topics include traffic, home, recreational, fire and occupational safety

3. **Proposed course catalog listing:**

Introduction to the history of safety in America. Examines steps involved in analyzing the causes and prevention of accidents. Emphasizes programs designed to educate the student in general safety concepts and principles, and an overview of statistical analysis, theories, and models used in hazard pre-planning and post-incident analysis and/or mitigation. Major topics include traffic, home, recreational, fire and occupational safety.

4. **Rationale for revision of the course catalog listing:**

Revisions were made to more accurately reflect course content.

5. **Proposed term for implementation:** Fall 2009

6. **Dates of prior committee approvals:**

Department of Public Health ____12-5-2008____

CHHS Undergraduate Curriculum Committee ____1/6/2009____

Undergraduate Curriculum Committee 01/22/09

University Senate _____

Attachment: Course Inventory Form

**College of Health and Services
Department of Public Health
Proposal to Revise Course Catalog Listing
(Consent Item)**

Proposal Date: 12/5/2008

Contact Person: Gary English, gary.english@wku.edu, 5-2678

1. Identification of course:
 - 1.1 Course prefix and number: HCA 340
 - 1.2 Course title: Health Care Organization and Management
 - 1.3 Credit hours: 3
2. Current course catalog listing:

This course, as a survey course, provides opportunities to examine the historic, social, political, and economic factors that shape the U.S. health care delivery system. Topics include the components of the healthcare delivery system such as medical office practices, hospitals, and long-term healthcare systems. Included are financial and non-financial resources found in the U.S., concepts of public health, quality of care, and strategies for improving access to care. The role of health care administration as critical to the system will be stressed.
3. Proposed course catalog listing:

Examines the historic, social, political, and economic factors that shape the U.S. health care delivery system. Topics include the components of the healthcare delivery system such as medical office practices, hospitals, and long-term healthcare systems. Included are financial and non-financial resources found in the U.S., concepts of public health, quality of care and outcomes measurement, and strategies for improving access to care. The role of health care administration as critical to the system will be stressed.
4. Rationale for revision of the course catalog listing:

Revisions were made to more accurately reflect course content.
5. Proposed term for implementation: Fall 2009
6. Dates of prior committee approvals:

Department of Public Health	12/5/2008
CHHS Undergraduate Curriculum Committee	<u> 1/6/2009 </u>
Undergraduate Curriculum Committee	01/22/09
University Senate	<u> </u>

Attachment: Course Inventory Form

Proposal Date: 12/5/2008
College of Health and Services
Department of Public Health
Proposal to Revise Course Catalog Listing
(Consent Item)

Contact Person: Gary English, gary.english@wku.edu, 5-2678

1. Identification of course:
 - 1.1 Course prefix and number: HCA 343
 - 1.2 Course title: Quality Management for Healthcare
 - 1.3 Credit hours: 3
2. Current course catalog listing:

Explores the history, philosophies, methods, and techniques used in continuous quality improvement programs, specifically for healthcare delivery systems. Topics include teamwork, problem identification, data collection, data analysis, implementation, and evaluation of system changes. Customer service problems, clinical concerns, current issues in quality improvement, productivity will be included in the discussion.
3. Proposed course catalog listing:

Examines the history, philosophies, methods, and techniques used in continuous quality improvement, specifically for healthcare delivery systems. Topics include problem identification, data collection and analysis, implementation, and evaluation of system changes. Customer service approach to health care, accreditation, credentialing, and current issues in quality improvement (performance improvement models and patient safety improvement), utilization management and risk management will be included in the discussion.
4. Rationale for revision of the course catalog listing:

Revisions were made to more accurately reflect course content.
5. Proposed term for implementation: Fall 2009
6. Dates of prior committee approvals:

Department of Public Health:	12/5/2008
CHHS Undergraduate Curriculum Committee	<u>1/6/2009</u>
Undergraduate Curriculum Committee	01/22/09
University Senate	_____

Attachment: Course Inventory Form

Proposal Date: 12/5/2008

**College of Health and Human Services
Department of Public Health
Proposal to Revise Course Catalog Listing
(Consent Item)**

Contact Person: Gary English, gary.english@wku.edu, 5-2678

1. Identification of course:
 - 1.1 Course prefix and number: ENV 360
 - 1.2 Course Title: Air Pollution Control
 - 1.3 Credit hours: 3
2. Current course catalog listing:

Air pollution sources, nature and behavior of air pollutants, air sampling and analysis, dispersion and diffusion in the atmosphere, air pollution meteorology, and methods and equipment for community air pollution control.
3. Proposed course catalog listing:

Examines air pollution sources, nature and behavior of air pollutants, air sampling and analysis, dispersion and diffusion in the atmosphere, air pollution meteorology, and methods and equipment for community air pollution control. Topics in indoor air quality (IAQ), modeling, and prediction, air quality control regulations, control strategies for stationary and mobile sources.
4. Rationale for revision of the course catalog listing:

Revision more accurately reflects course content.
5. Proposed term for implementation: Fall 2009
6. Dates of prior committee approvals:

Department of Public Health	December 5, 2008
CHHS Undergraduate Curriculum Committee	<u> 1/6/2009 </u>
Undergraduate Curriculum Committee	01/22/09
University Senate	<u> </u>

Attachment: Course Inventory Form

Proposal Date: 12/15/2008

**College of Health and Human Services
Department of Public Health
Proposal to Revise Course Catalog Listing
(Consent Item)**

Contact Person: Gary English, gary.english@wku.edu, 5-2678

1. Identification of course:
 - 1.1 Course Prefix and number: ENV 365
 - 1.2 Course title: Air Pollution Control Laboratory
 - 1.3 Credit Hours: 1
2. Current course catalog listing: Lab two hours per week.
3. Proposed course catalog listing:

Provides hands-on experience with field instrumentation and equipment, calibration methods and quantitative determination of different physical and chemical air pollutants. Examines air sampling, measurement and analytical methodologies and basic scientific and analytical techniques used in air pollution control.
4. Rationale for revision of the course catalog listing:

Revisions were made to more accurately reflect course content.
5. Proposed term for implementation: Fall 2009
6. Dates of prior committee approvals:

Department of Public Health	December 5, 2008
CHHS Undergraduate Curriculum Committee	<u> 1/6/2009 </u>
Undergraduate Curriculum Committee	01/22/09
University Senate	<u> </u>

Attachment: Course Inventory Form

Proposal Date: 12/5/2008

**College of Health and Human Services
Department of Public Health
Proposal to Revise Course Catalog Listing
(Consent Item)**

Contact Person: Gary English, gary.english@wku.edu, 5-2678

1. Identification of course:
 - 1.1 Course Prefix and number: PH 365
 - 1.2 Course Title: Human Sexuality
 - 1.3 Credit Hours: 3
2. Current course catalog listing:

Includes sociological, and physiological, and psychological aspects of human sexuality in relation to family life, courtship, marriage, reproduction, child health, morbidity, and aging. Includes information on sex education in the home, school, and community.
3. Proposed course catalog listing:

Examines sociological, physiological, and psychological aspects of human sexuality in relation to family life, courtship, marriage, reproduction, education, and aging. Includes information on sexual assault, sexually transmitted infections (STIs), and HIV/AIDS
4. Rationale for revision of the course catalog listing:

Revisions were made to more accurately reflect course content.
5. Proposed term for implementation: Fall 2009
6. Dates of prior committee approvals:

Department of Public Health	December 5, 2008
CHHS Undergraduate Curriculum Committee	<u> 1/6/2009 </u>
Professional Education Council	<u> 1/14/2009 </u>
Undergraduate Curriculum Committee	01/22/09
University Senate	<u> </u>

Attachment: Course Inventory Form

Proposal Date: 12/5/2008

**College of Health and Human Services
Department of Public Health
Proposal to Revise Course Catalog Listing
(Consent Item)**

Contact Person: Gary English, gary.english@wku.edu, 5-2678

1. Identification of course:
 - 1.1 Course Prefix and number: PH 384
 - 1.2 Course Title: Introduction to Epidemiology
 - 1.3 Credit Hours: 3
2. Current course catalog listing:

Current methodology of studying distribution, etiology and control of communicable and chronic diseases, and other insults on human health.
3. Proposed course catalog listing:

Explores the distribution and determinants of health and diseases, illnesses, injuries, disability, and death in populations. Examines the application of epidemiologic procedures to the understanding of the occurrence and control of conditions such as infectious and chronic diseases, mental disorders, community and environmental health hazards, accidents, and geriatric problems.
4. Rationale for revision of the course catalog listing:

Revisions were made to more accurately reflect course content.
5. Proposed term for implementation: Fall 2009
6. Dates of prior committee approvals:

Department of Public Health	December 5, 2008
CHHS Undergraduate Curriculum Committee	__1/6/2009__
Undergraduate Curriculum Committee	01/22/09
University Senate	_____

Attachment: Course Inventory Form

Proposal Date: 12/5/2008

**College of Health and Human Services
Department of Public Health
Proposal to Revise Course Catalog Listing
(Consent Item)**

Contact Person: Gary English, gary.english@wku.edu, 5-2678

1. Identification of course:
 - 1.1 Course prefix and number: HCA 440
 - 1.2 Course title: Health Economics
 - 1.3 Credit hours: 3
2. Current course catalog listing:

Provides an overview of the characteristics of the market for medical services with emphasis on medical costs, competition, health cost inflation, health insurance, medical service markets, regulation, and economic strategies for health care managers. This course includes financing and cost-control in foreign health systems.
3. Proposed course catalog listing:

Examines the characteristics of the markets for medical services with emphasis on medical costs, competition, health cost inflation, health insurance, medical service markets, regulation, and economic strategies for health care managers. This course includes financing and cost-control in foreign health systems.
4. Rationale for revision of the course catalog listing:

Revisions were made to more accurately reflect course content.
5. Proposed term for implementation: Fall 2009
6. Dates of prior committee approvals:

Department of Public Health	December 5, 2008
CHHS Undergraduate Curriculum Committee	__1/6/2009__
Undergraduate Curriculum Committee	01/22/09
University Senate	_____

Attachment: Course Inventory Form

Proposal Date: 12/5/2008

**College of Health and Human Services
Department of Public Health
Proposal to Revise Course Catalog Listing
(Consent Item)**

Contact Person: Gary English, gary.english@wku.edu, 5-2678

1. Identification of course:
 - 1.1 Course Prefix and number: PH 443
 - 1.2 Course Title: Health Problems of the Aged
 - 1.3 Credit Hours: 3
2. Current course catalog listing:

This course provides students with knowledge of the ecological factors affecting human health and longevity, current health problems and research concerning changing concepts of health and disease as they relate to the aged.
3. Proposed course catalog listing:

Examines the multiple factors affecting health of older adults. The course will discuss normal changes in aging and how to promote health of older adults. Students are required to have hands-on field experience. Students are responsible for their own off campus transportation.
4. Rationale for revision of the course catalog listing:

Revisions were made to more accurately reflect course content.
5. Proposed term for implementation: Fall 2009
6. Dates of prior committee approvals:

Department of Public Health	December 5, 2008
CHHS Undergraduate Curriculum Committee	__1/6/2009__
Undergraduate Curriculum Committee	01/22/09
University Senate	_____

Attachment: Course Inventory Form

Proposal Date: 12/5/2008

**College of Health and Human Services
Department of Public Health
Proposal to Revise Course Catalog Listing
(Consent Item)**

Contact Person: Gary English, gary.english@wku.edu, 5-2678

1. Identification of course:
 - 1.1 Course Prefix and number: PH 461
 - 1.2 Course Title: Comprehensive School Health Program
 - 1.3 Credit Hours: 3
2. Current course catalog listing:

Examination and application of the components of the comprehensive school health program. Discussion of the role of administrators, teachers, counselors and health service personnel in conducting, coordinating and evaluating the comprehensive school health program. Includes visitation in public schools.
3. Proposed course catalog listing:

Examines the instructional component of a comprehensive school health program. Discusses the role of administrators, teachers, counselors, health service personnel and policy issues in coordinating and evaluating a comprehensive school health program.
4. Rationale for revision of the course catalog listing:

Revisions were made to more accurately reflect course content.
5. Proposed term for implementation: Fall 2009
6. Dates of prior committee approvals:

Department of Public Health	December 5, 2008
CHHS Undergraduate Curriculum Committee	<u> 1/6/2009 </u>
Professional Education Council	<u> 1/14/2009 </u>
Undergraduate Curriculum Committee	01/22/09
University Senate	<u> </u>

Attachment: Course Inventory Form

Proposal Date: 12/5/2008

**College of Health and Human Services
Department of Public Health
Proposal to Revise Course Catalog Listing
(Consent Item)**

Contact Person: Gary English, gary.english@wku.edu, 5-2678

1. Identification of course:
 - 1.1 Course Prefix and number: PH 490
 - 1.2 Course Title: Internship
 - 1.3 Credit Hours: 3
2. Current course catalog listing:

Supervised, full-time, 12-week field experience planned with various agencies, organizations, facilities, industries, and businesses with health related missions or programs, and approved by the Department of Public Health. Off campus travel required.
3. Proposed course catalog listing:

Supervised, 400 hours field experience planned with various agencies, organizations, facilities, industries, and businesses with health related missions or programs, and approved by the Department of Public Health. Off campus travel required, and students are responsible for their own transportation.
4. Rationale for revision of the course catalog listing:

Revisions were made to more accurately reflect course content.
5. Proposed term for implementation: Fall 2009
6. Dates of prior committee approvals:

Department of Public Health	December 5, 2008
CHHS Undergraduate Curriculum Committee	___1/6/2009___
Undergraduate Curriculum Committee	01/22/09
University Senate	_____

Attachment: Course Inventory Form

Proposal Date: 11/11/2008

**College of Education & Behavioral Sciences
Department of Educational Administration, Leadership, & Research
Proposal to Delete a Course
(Consent Item)**

Contact Person: Jeanne R. Fiene, jeanne.fiene@wku.edu 5-4890

1. Identification of course:

- 1.1 Current course prefix (subject area) and number: EDFN 270
- 1.2 Course title: Honors Social & Philosophical Issues in Education
- 1.3 Credit hours: 3

2. Rationale for the course deletion:

This course is no longer taught.

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

Since this course has not been offered since 1993, deleting it will not affect our program or those of other departments.

4. Proposed term for implementation: Spring 2009

5. Dates of prior committee approvals:

Department of EALR 11/11/2008

CEBS Curriculum Committee 12/02/2008

Professional Education Council 12/10/2008

Undergraduate Curriculum Committee 01/22/09

University Senate _____

Attachment: Course Inventory Form

Proposal Date: 11/05/2008

**College of Education and Behavioral Sciences
Department of Special Instructional Programs
Proposal to Delete a Course
(Consent Item)**

Contact Person: Janice Ferguson janice.ferguson@wku.edu 745-6123

1. Identification of course:

- 1.1 Current course prefix (subject area) and number: EXED 491
- 1.2 Course title: Lecture in Lieu of Student Teaching
- 1.3 Credit hours: 4

2. Rationale for the course deletion: EXED 491 has not been taught in several years, and there are no plans to teach it again in the future.

3. Effect of course deletion on programs or other departments, if known:
No effect is anticipated. Only EXED majors took this course.

4. Proposed term for implementation: Spring 2009

5. Dates of prior committee approvals:

Department/Division:	<u>11/7/08</u>
CEBS Curriculum Committee	<u>12/2/08</u>
Professional Education Council	<u>12/10/08</u>
Undergraduate Curriculum Committee	<u>01/22/09</u>
University Senate	<u></u>

Attachment: Course Inventory Form

Proposal Date: 24 September 2008

**Potter College of Arts and Letters
Department of English
Proposal to Suspend a Course
(Consent Item)**

Contact Person: karen.schneider@wku.edu 5-3046

1. Identification of course:

- 1.1 Current course prefix (subject area) and number: ENG 319
- 1.2 Course title: Teaching Language in the Grades
- 1.3 Credit hours: 3

2. Rationale for the course suspension: This course was once required for the Middle Grades Education (concentration in English) major, but program faculty in Curriculum and Instruction have dropped this course from that curriculum (substituting a Literacy course). As this course was taken by no other majors, we no longer need it.

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

4. Proposed term for implementation: 200930

5. Dates of prior committee approvals:

English Department:	10/24/2008
PCAL Curriculum Committee	11/6/2008
Professional Education Council	11/12/2008
Undergraduate Curriculum Committee	_01/22/09_____
University Senate	_____

Attachment: Course Inventory Form

**Community College
Division of Health Sciences
Proposal to Revise Course Title
(Consent Item)**

Contact Person: Karen Sansom, karen.sansom@wku.edu, 780-2567

- 1. Identification of course:**
 - 1.1 Current course prefix (subject area) and number: HIM 220C
 - 1.2 Current course title: Statistical Applications in Healthcare Information
 - 1.3 Credit hours: 2
- 2. Proposed course title:** Statistical Applications in Health Information Management
- 3. Proposed abbreviated course title:** Stat Appl HIM
- 4. Rationale for the revision of course title:**

This change is consistent with the program name change from Healthcare Information Systems to Health Information Management
- 5. Proposed term for implementation:** Fall 2009
- 6. Dates of prior committee approvals:**

Health Sciences Division:	10/10/2008
BGCC Curriculum Committee	11/04/2008
Undergraduate Curriculum Committee	01/22/09
University Senate	_____

Attachment: Course Inventory Form

Proposal Date: 09/17/2008

**Community College
Division of Health Sciences
Proposal to Revise Course Title
(Consent Item)**

Contact Person: Karen Sansom, karen.sansom@wku.edu, 780-2567

- 1. Identification of course:**
 - 1.1 Current course prefix (subject area) and number: HIM 221C
 - 1.2 Current course title: Healthcare Information Management
 - 1.3 Credit hours: 3
- 2. Proposed course title:** Health Information Management & Organization
- 3. Proposed abbreviated course title:** Hlth Info Mgmt & Org
- 4. Rationale for the revision of course title:** This change is consistent with the program name change from Healthcare Information Systems to Health Information Management and more accurately reflects the managerial component of the course content.
- 5. Proposed term for implementation:** Fall 2009
- 6. Dates of prior committee approvals:**

Health Sciences Division:	10/10/2008
BGCC Curriculum Committee	11/04/2008
Undergraduate Curriculum Committee	01/22/09
University Senate	_____

Attachment: Course Inventory Form

Proposal Date: 09/17/2008

**Community College
Health Sciences Division
Healthcare Information Systems Program
Proposal to Revise a Program
(Consent Item)**

Contact Person: Karen Sansom, karen.sansom@wku.edu, 780-2567

1. Identification of program:

- 1.1 Current program reference number: 261
- 1.2 Current program title: Healthcare Information Systems
- 1.3 Credit hours: 67

2. Identification of the proposed program changes:

Change program title to: Health Information Management-Associate Degree

3. Detailed program description:

Current Curriculum	Proposed Curriculum
Healthcare Information Systems Program	Health Information Management-Associate Degree
I. General Education (16 semester hours) ▪ English 100C ▪ CSCI 145 ▪ PSYC 100C ▪ MATH 109C or 116C ▪ BIO 131C	I. General Education (16 semester hours) ▪ English 100C ▪ CSCI 145 ▪ PSYC 100C ▪ MATH 109C or 116C ▪ BIO 131C
II. <u>Healthcare Information Systems Courses</u> (39 semester hours) ▪ HCIS 100C-Health Data Content & Structure ▪ HICS 110C-Specialized Health Information Systems ▪ HCIS 220C-Statistical Applications in Healthcare Information ▪ HCIS 221C-Healthcare Information Management ▪ HCIS 222C-Clinical Quality Assessment & Performance Improvement ▪ HCIS 225C-Legal Issues in Healthcare Information ▪ HCIS 230C-Computer Applications in Healthcare Information ▪ HCIS 250C-Clinical Classification Systems ▪ HCIS 251C-Reimbursement Methodologies ▪ HCIS 290C-Medical Terminology	II. <u>Health Information Management Courses</u> (39 semester hours) ▪ HIM 100C-Health Data Content & Structure ▪ HIM 110C-Specialized Health Information Management ▪ HIM 220C-Statistical Applications in Health Information Management ▪ HIM 221C-Health Information Management & Organization ▪ HIM 222C-Clinical Quality Assessment & Performance Improvement ▪ HIM 225C-Legal Issues in Health Information Management ▪ HIM 230C-Computer Applications in Health Information Management ▪ HIM 250C-Clinical Classification Systems ▪ HIM 251C-Reimbursement Methodologies ▪ HIM 290C-Medical Terminology

▪ HCIS 291C-Advanced Medical Terminology ▪ HCIS 292C-Pharmacology and Laboratory Diagnostics ▪ HCIS 295C-Seminar and Field Experience	▪ HIM 291C-Advanced Medical Terminology ▪ HIM 292C-Pharmacology and Laboratory Diagnostics ▪ HIM 295C-Seminar and Field Experience
III. Required Support Courses (3 semester hours)	III. Required Support Courses (3 semester hours)
▪ BIOL 275C-Human Pathophysiology	▪ BIOL 275C-Human Pathophysiology
IV. Electives (9 semester hours)	IV. Electives (9 semester hours)
▪ Category B Elective ▪ Category C Elective ▪ Elective	▪ Category B Elective ▪ Category C Elective ▪ Elective
67 Total Semester Hours	67 Total Semester Hours

4. Rationale for the proposed program change:

This change reflects the terminology used by the program's accrediting organization (Commission on Accreditation for Health Informatics and Information Management Education), is consistent with verbiage in the community of interest and minimizes confusion with programs in the Computer Information Systems Department.

5. Proposed term for implementation and special provisions (if applicable): Fall 2009

6. Dates of prior committee approvals:

Health Sciences Division: 10/15/2008

BGCC Curriculum Committee 11/04/2008

Undergraduate Curriculum Committee 01/22/09

University Senate _____

Attachment: Program Inventory Form

Proposal Date: 13 November 2008

**Potter College of Arts and Letters
Department of English
Proposal to Suspend a Program
(Consent Item)**

Contact Person: karen.schneider@wku.edu 5-3046

1. Identification of program:

- 1.1 Program reference number: 496
- 1.2 Program title: English Writing Minor
- 1.3 Credit hours: 21

2. Rationale for the program suspension: We are replacing this generic writing minor with two new specifically focused minors (Creative Writing and Professional Writing) that will better prepare our students to pursue their professional and personal goals.

3. Effect on current students or other departments, if known: None, except to offer students in Business and other majors a better alternative for developing their rhetorical skills.

4. Proposed term for implementation: 200930

5. Dates of prior committee approvals:

English Department: 11/21/08

PCAL Curriculum Committee 12/4/08

Undergraduate Curriculum Committee 01/22/09

University Senate _____

Attachment: Program Inventory Form

Proposal Date: 3/12/2008

**College of Education and Behavioral Sciences
Department of Curriculum and Instruction
Proposal to Create a New Course
(Action Item)**

Contact Person: David Erbach, david.erbach@wku.edu, (270) 745-3652

1 Identification of proposed course:

- 1.1 Course prefix and number: SMED 210
- 1.2 Course title: Knowing and Learning in Mathematics and Science
- 1.3 Abbreviated course title: Know & Learn Math/Science
- 1.4 Credit hours and contact hours: 3.0
- 1.5 Type of course: L (lecture)
- 1.6 Prerequisite: SMED 101
- 1.7 Course catalog listing:
Introduction to theories and principles of cognition and learning with emphasis on knowing and learning in math and science. Introduction to research on learning, memory, individual development, motivation and intelligence. Applications of learning theory will be explicitly tied to design of lesson plans, instruction and assessment.

2 Rationale:

- 2.1 Reason for developing the proposed course:
This course is part of SKyTeach, a National Math and Science Initiative (NMSI) funded program to replicate the University of Texas at Austin's UTeach curriculum for preparation of math and science teachers. Adopting this sequence meets NMSI's requirement for replication of UTeach at WKU. This course is proposed to replace the usual educational psychology course, PSY 310. It will be an introduction to the theories for knowing and learning in math and science, drawing on insights from cognition and learning sciences.
- 2.2 Projected enrollment in the proposed course:
Based on enrollments in the current math and science teacher education sequences and the successful recruitment of math/science majors for the fall 2008 sections of SMED 101, we expect 60 students per year. When the SKyTeach program is approved, it will become the sole path to math/science teacher certification for middle or high school.
- 2.3 Relationship of the proposed course to courses now offered by the department:
This course combines components of MGE/SEC 477/479 and PSY 310. SKyTeach students will take this course instead of existing courses.
- 2.4 Relationship of the proposed course to courses offered in other departments:
This course resembles PSY 310 but emphasizes knowing and learning in mathematics and science as understood from an interdisciplinary learning sciences perspective. The Psychology faculty reviewed this proposal in July 2008.
- 2.5 Relationship of the proposed course to courses offered in other institutions:
This course is a replication of the *Knowing and Learning* course in the UTeach program.

3 Discussion of proposed course:

3.1 Course objectives: This course introduces students to theories of cognition and learning as applied to the domains of mathematics and science. The learning sciences perspective draws from inquiry in a number of disciplines, including psychology, anthropology, sociology, biology, linguistics, neuroscience, individual developmental, and artificial intelligence. The perspective emphasizes investigation of standards for knowing, how knowledge is structured and how learning affects structure. The course will focus on tensions inherent in domain-general characterizations of understanding (e.g. intelligence) and domain-specific conceptions of knowing, in big ideas in math and science and the evolution of those ideas; and in math and science education.

3.2 Content outline:

Individual differences, cultural influences, social construction of knowledge, and equity issues will be considered within each topic as outlined below:

- Self development and social development
- Brain development and cognitive development
- Memory and cognitive load
- Intelligence
- The nature of knowing and knowledge structure
- Learning theory
- Identifying and responding to individual learning differences
- Motivation, learning goals, and teacher influences
- Knowledge transfer
- Problem solving: representation and strategies
- Conceptualization and learning as conceptual change
- Creativity
- Standards for math and science education
- Classroom assessment
- Standardized testing

3.3 Student expectations and requirements:

Students will be able to:	Evidence (Student Products)
1. Articulate standards for knowing science and mathematics and the theoretical frames which give rise to such standards	• Contributing to class discussion • Analysis of clinical interviews • Examinations
2. Describe how knowing and learning are structured, how knowledge structures change, and how change is facilitated in math & science classrooms	• Contributing to class discussion • Analysis of clinical interviews • Examinations • Paper
3. Describe paradigms for evaluating understanding (<i>i.e.</i> , theories of general intelligence versus expert/novice)	• Contributing to class discussion • Examinations
4. Describe links between coming to know science & math in individuals and the evolution of big ideas in the domains of math and science.	• Contributing to class discussion • Analysis of clinical interviews • Examinations
Students will be able to:	Evidence (Student Products)
5. Articulate the interaction of domain/topic, aspects of individual learners & instructional choices on learning.	• Contributing to class discussion • Develop and revise model throughout term • Examinations
6. Conduct clinical interviews with subject(s)	• Transcription and analysis of interviews

engaged in a problem solving activity. Students will record the interview, transcribe and analyze the activity.	
7. Express informed opinions on current issues and tensions in education, especially as they relate to mathematics and science instruction.	• Contributing to class discussion • Analysis of clinical interviews • Examinations • Paper

3.4 Tentative texts and course materials:

- Bass, H. (1993). Let's measure what's worth measuring. Education Week, October 2005
Editorial Projects in Education.
- Bialystok, E. and Craik, F. (2006). *Lifespan Cognition: Mechanisms of Change*. Oxford University Press.
- Bransford, J.D., Brown, A.L., and Cocking, R.R., (eds.). (1999). *How People Learn: Brain, Mind, Experience, and School*. National Academy Press.
- Bruer, J.T. (1993). *Schools For Thought: A Science of Learning in the Classroom*. MIT Press: Bradford Books.
- Bruer, J.T. (1996), Knowing as Doing. in *The Culture of Education*. Harvard Univ. Press.
- Carraher, T. Carraher, D. & Schliemann, A. (1985). Mathematics in the streets and in the schools. *British Journal of Developmental Psychology*, 3, 21-29.
- Darling-Hammond, L. and J. Bransford (eds.). (2005). *Preparing Teachers for a Changing World: What Teachers Should Learn and Be Able to Do*. Wiley: Jossey-Bass.
- Hong, J-C. and Liu, M-C. (2003). A study on thinking strategy between experts and novices of computer games. *Computers in Human Behavior* 19, 25-258.
- Kuhn, D. (2007) Reasoning about multiple variables: Control of variables is not the only challenge. *Science Education*, 91, 710-726.
- Kyza, E. and Edelson, D. (2005). Scaffolding middle school students' coordination of theory and evidence, *Educational Research and Evaluation*, 11, 545-560.
- Norman, D. (1994). *Things That Make Us Smart : Defending Human Attributes in the Age of the Machine*. Addison-Wesley.
- O'Connor, M. C. and Michaels, S. (1996). Shifting participant frameworks in Discourse, Learning and Schooling. D. Hicks (ed). Cambridge University Press.

4 Resources:

- 4.1 Library resources: Library resource form and bibliography available upon request
- 4.2 Computer resources: No new additional resources required

5. Budget implications:

- 5.1 Proposed method of staffing: Current staff
- 5.2 Special equipment needed: None
- 5.3 Expendable materials needed: None
- 5.4 Laboratory materials needed: None

6. Proposed term for implementation: Fall 2009

7. Dates of prior committee approvals:

Department of Curriculum & Instruction: 25 April 2008

CEBS Curriculum Committee: 5 August 2008

Professional Education Council: 8 October 2008

Undergraduate Curriculum Committee: _01/22/09

General Education Committee: _____

University Senate: _____

Proposal Date: 3/12/2008

**College of Education and Behavioral Sciences
Department of Curriculum and Instruction
Proposal to Create a New Course
(Action Item)**

Contact Person: David Erbach, david.erbach@wku.edu, (270) 745-3652

1. Identification of proposed course:

- 1.1 Course prefix and number: SMED 320
- 1.2 Course title: Classroom Interactions
- 1.3 Abbreviated course title: Classroom Interactions
- 1.4 Credit hours and contact hours: 3.0
- 1.5 Type of course: L (lecture)
- 1.6 Prerequisite: SMED 210
- 1.7 Course catalog listing:
Designed to expand students' abilities to understand how learning theories are applied in instructional settings as students develop, implement and evaluate activities and strategies for teaching diverse students equitably. Fieldwork required; students are responsible for arranging their own transportation to sites.

2. Rationale:

- 2.1 Reason for developing the proposed course:
This course is part of SKyTeach, a National Math and Science Initiative (NMSI) funded program to replicate the University of Texas at Austin's UTeach curriculum for preparation of math and science teachers. Adopting this sequence meets NMSI's requirement for replication of UTeach at WKU. This course ties together the earlier courses in the program, with the students' initial experiences to teaching and the initial theories for knowing and learning math and science. Increased attention is paid to classroom management strategies, use of technology, and instructional methods suited for students with diverse learning needs. The mentored field experiences continue with lessons taught in high school classrooms.
- 2.2 Projected enrollment in the proposed course:
Based on enrollments in the current math and science teacher education sequence and the successful recruitment of math/science majors for the one-time-only fall 2008 sections of SMED 101, we expect 60 students per year.
- 2.3 Relationship of the proposed course to courses now offered by the department:
This course will most closely resemble MGE 385, MGE 485, SEC 351, and SEC 453. SKyTeach students will take this course in lieu of the existing courses.
- 2.4 Relationship of the proposed course to courses offered in other departments:
No other department offers courses in math and science education for middle grade and secondary teachers.
- 2.5 Relationship of the proposed course to courses offered in other institutions:
This course is a replication of the *Classroom Interactions* course in the University of Texas at Austin's UTeach program.

3. Discussion of proposed course:

- 3.1 Course objectives:

Students who successfully complete this course will be able to:

- understand, discuss, and judge the merits of multiple models of teaching
- critically evaluate research results on best teaching practices
- observe and analyze how instruction develops content understanding
- observe and analyze instruction with regard to equitable and diverse participation
- develop a plan to create a positive learning environment and a well-managed classroom
- plan and teach multi-day math/science lessons on an assigned topic
- use student work as evidence of classroom results
- use school, classroom and student data to examine contextual factors
- use teaching technologies and understand how they can affect classroom interaction
- design lessons that include multicultural perspectives
- begin development of a professional teaching portfolio

3.2 Content outline:

Learning with meaning

Teacher interview

Unit planning: 5E's

Plan, teach, and analyze lessons

Motivating positive student behavior

Safety certification

Structuring group work

Alternative assessments

Effective rules and procedures for classroom management

Adaptations for students with special needs and giftedness

Models of multicultural education

Equity frameworks: gender, culture, ELL, funding, and assessment

3.3 Student expectations and requirements:

Students will be able to:	Evidence (Student Products)
1. Compare models of teaching and use various models of teaching as appropriate to design three high school lessons.	▪ Written justification of lesson plans ▪ Discussions evaluating teaching ▪ Using various models (in class and in field) ▪ Observation by mentor teacher & instructor
2. Plan multiple-day lesson plans on assigned subjects in middle school and high school math and science	▪ Lesson plans, including essays justifying them and responses to reviewer comments ▪ Evaluations of practice teaching ▪ Complete appropriate sections of portfolio ▪ Critical performance
3. Teach multiple-day lessons in high school math/science classes.	▪ Video tapes of teaching ▪ Observer comments on teaching.
4. Analyze their own and others' teaching in terms of how the instruction develops the content understanding of the students involved.	▪ Analyses of teaching with video samples and other student artifacts ▪ Development of a knowledge map for assigned lessons in high school classrooms ▪ Complete appropriate sections of portfolio
5. Analyze their own and others'	▪ Analyze teaching with video samples and other

Students will be able to:	Evidence (Student Products)
ability to address equity issues in teaching (e.g., those learning in a second language, with disabilities, from minority cultures, etc.).	artifacts with regard to equity issues ▪ Presentation and discussion of video samples and artifacts of teaching ▪ Complete appropriate sections of portfolio ▪ Lesson plans ▪ Critical performance
6. Become familiar with policies, classroom strategies, and state and national standards.	▪ Participation in discussion and Internet postings regarding policies concerning students who have diverse needs ▪ Lesson plans ▪ Critical performance
7. Explore theory and research regarding classroom interactions and broader educational policies effecting content understanding and equity for all students	▪ Participation in discussions of readings ▪ Posting of commentaries on the Internet ▪ Written analyses of readings ▪ Lesson plans ▪ Critical performance
8. Become familiar with relevant types of teaching technology and analyze how technology can affect classroom interactions.	▪ Artifacts produced by use of technology ▪ Discussions of effectiveness of technology ▪ Written analyses of the uses of technology ▪ Complete appropriate sections of portfolio

3.4 Tentative texts and course materials:

H. K. Wong and R. Wong. (1998) The First Days of School. Harry K Wong Publications: Mountain View, CA.

Grant, C.A. & Sleeter, C.E. (2006) Turning on Learning: Five Approaches for Multicultural Teaching Plans for Race, Class, Gender and Disability, 4ed. Wiley.

4. Resources:

4.1 Library resources: Library resource form and bibliography available upon request

4.2 Computer resources: No new additional resources required

5. Budget implications:

5.1 Proposed method of staffing: Current staff

5.2 Special equipment needed: None

5.3 Expendable materials needed: None

5.4 Laboratory materials needed: None

6. Proposed term for implementation: Fall 2009

7. Dates of prior committee approvals:

Department of Curriculum & Instruction: 25 April 2008

CEBS Curriculum Committee: 5 August 2008

Professional Education Council: 8 October 2008

Undergraduate Curriculum Committee: 01/22/09

University Senate: _____

Proposal Date: 3/12/2008

**College of Education and Behavioral Sciences
Department of Curriculum and Instruction
Proposal to Create a New Course
(Action Item)**

Contact Person: David Erbach, david.erbach@wku.edu, (270) 745-3652

1. Identification of proposed course:

- 1.1 Course prefix and number: SMED 340
- 1.2 Course title: Perspectives on Mathematics and Science
- 1.3 Abbreviated course title: Perspectives on Math & Science
- 1.4 Credit hours and contact hours: 3.0
- 1.5 Type of course: C (lecture/lab)
- 1.6 Prerequisite: SMED 210
- 1.7 Course catalog listing:
Introduction to the historical, social, and philosophical implications of math and science through investigations of pivotal experiments and findings. Includes integrated laboratory experiences that replicate significant discoveries.

2. Rationale:

- 2.1 Reason for developing the proposed course:
This course is part of SKyTeach, a National Math and Science Initiative (NMSI) funded program to replicate the University of Texas at Austin's UTeach curriculum for preparation of math and science teachers. Adopting this sequence meets NMSI's requirement for replication of UTeach at WKU. In this SKyTeach course, students will explore different ways that humans have explained the workings of the natural world. This course has interlocking goals: to present an overview of the history and philosophy of mathematics and science; to broaden comprehension of all subjects taught in middle and secondary grades and enable math/science teachers to put this broader history and context to work; and to improve research and information analysis skills.
- 2.2 Projected enrollment in the proposed course:
Based on enrollments in current math and science teacher education sequences and the successful recruitment of math/science majors for the one-time-only Fall 2008 sections of SMED 101, 60 students per year are expected to enroll.
- 2.3 Relationship of the proposed course to courses now offered by the department:
The current teacher preparation program has no comparable course. The introduction of this course to the math and science teacher preparations sequence will explicitly address the national and Kentucky science standards regarding the history and nature of science.
- 2.4 Relationship of the proposed course to courses offered in other departments:
This course has overlapping content with HIST 119/120, MATH 409 and the suspended PHIL 330, but emphasizes specific case studies and integration of an interdisciplinary approach into teaching. A letter of support for this proposal was provided by the Department of Philosophy & Religion in April 2008. The Department of History reviewed this proposal at a faculty meeting in August 2008. The Potter College Curriculum Committee discussed this proposal as an information-only item during its September 2008 meeting.
- 2.5 Relationship of the proposed course to courses offered in other institutions:
This course is a replication of the *Perspective on Mathematics and Science* course in the University of Texas at Austin's UTeach program.

3. Discussion of proposed course:

3.1 Course objectives:

A student who successfully completes this course will be able to:
provide, through detailed case studies of major events, an overview of the history of science and math to better prepare math/science teachers to comprehend their field;
put historical and philosophical perspectives and context to work in pedagogy; and
improve research and information analysis skills.

Some of the readings will be from primary sources, others will be from secondary texts.

3.2 Content outline:

Topics in math and science, such as:

What is science anyway? What is discovery? What is proof?
Using mathematics to describe nature
Pythagorean mystics, the irrational, and Plato's philosophy of math
Laws of math: fundamental rules of algebra
Controversies in the history of negative and imaginary numbers
Copernicus, Kepler, Galileo's observations and the conflict with the Church
J.J. Thomson, the discovery of the electron, and the nature of discovery

How the scientific method deals with contradictions and controversy, such as:

Infinitesimally small contradictions in the calculus
Alchemy, elements, and the philosopher's stone
Darwin's explorations, controversies over evolution, how to discuss it in school
Continents in motion, Wegener versus everyone else
Einstein and the relativity of space and time
Big science – the atomic bomb or the Human Genome Project
Making new things – organic chemistry, cloning, and Frankenstein's monster
Human nature – improving people, eugenics, and the bumps on your head

Diversity and Multicultural Themes in Mathematics and Science, such as:

Contributions to Mathematics and Science by women and minorities
Contributions to Mathematics and Science by cultures other than European cultures

Developing thematic lessons, such as:

Deep time and the age of the earth
Species, hybrids, and monsters
Accidental science and the prepared mind: X-rays, penicillin, Velcro, and nylon

3.3 Student expectations and requirements:

Students will be able to:	Evidence (Student Products)
1. Develop an overview of the progression of mathematics and science	▪ Quizzes ▪ Weekly reflective writing assignments ▪ Research papers
2. Examine the underpinnings of modern science and mathematics by analyzing the contributions of key individuals	▪ Quizzes ▪ Research papers ▪ Project reports ⊕▪ Research and reporting on the contributions of women, minorities, and other cultures other to the development of mathematics and science
3. Develop skills in searching for, retrieving, and evaluating the provenance	⊕▪ Research-skills quiz ▪ Annotated bibliographies

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Students will be able to:	Evidence (Student Products)
and reliability of source materials	
4. Integrate approaches and material learned in the course with independent research and science or math content to design middle and high school math/science lessons	▪ 5-E lesson plan designed for middle or high school students that addresses standards, and integrates approaches and material learned in the course with math/science content ▪ Feedback for 5-E lessons taught to peers ▪ Project reports
5. Replicate pivotal experiments, techniques, and findings	▪ Active participation in class discussions ▪ Project reports

- 3.4 Tentative texts and course materials:
Course packet of selected readings, prepared by the instructor

4. Resources:

- 4.1 Library resources: See attached library resource form and bibliography
4.2 Computer resources: No new resources required

5. Budget implications:

- 5.1 Proposed method of staffing: Current faculty
5.2 Special equipment needed: None
5.3 Expendable materials needed: None
5.4 Laboratory materials needed: None

6. Proposed term for implementation: Fall 2009

7. Dates of prior committee approvals:

Department of Curriculum & Instruction: 25 April 2008
CEBS Curriculum Committee: 2 December 2008
Professional Education Council: 10 December 2008
Undergraduate Curriculum Committee: _01/22/09
General Education Committee: _____
University Senate: _____

Proposal Date: 3/12/2008

**College of Education and Behavioral Sciences
Department of Curriculum and Instruction
Proposal to Create a New Course
(Action Item)**

Contact Person: David Erbach, david.erbach@wku.edu, (270) 745-3652

1. Identification of proposed course:

- 1.1 Course prefix and number: SMED 360
- 1.2 Course title: Research Methods for Math and Science Teachers
- 1.3 Abbreviated course title: Research Methods
- 1.4 Credit hours and contact hours: 3.0
- 1.5 Type of course: B (lab)
- 1.6 Prerequisite: SMED 210
- 1.7 Course catalog listing:

Laboratory-based introduction to the tools and techniques used by scientists and mathematicians to further an understanding of the natural world and application of this knowledge to math and science education. Students will design and carry out laboratory investigations, and present written and oral reports of the results.

2. Rationale:

- 2.1 Reason for developing the proposed course:

This course is part of SKyTeach, a National Math and Science Initiative (NMSI) funded program to replicate the University of Texas at Austin's UTeach curriculum for preparation of math and science teachers. Adopting this sequence meets NMSI's requirement for replication of UTeach at WKU. The purpose of this course is to present SKyTeach students with the tools used to solve mathematical and scientific problems. Through performing their own investigations, future math and science teachers will become familiar with the processes by which investigators develop the knowledge and insights that are eventually taught in conventional mathematics and science classes.
- 2.2 Projected enrollment in the proposed course:

Based on enrollments in current math and science teacher education sequences and the successful recruitment of math/science majors for the one-time-only Fall 2008 sections of SMED 101, 60 students per year are expected to enroll.
- 2.3 Relationship of the proposed course to courses now offered by the department:

The current teacher preparation program has no comparable course. The introduction of this course to the math and science teacher preparations sequence will explicitly address the national and Kentucky science standards regarding scientific ways of thinking and working. The pre-service teachers will take part in original science and mathematics research projects presented in the context of how grade school students would be able to use such investigations to learn more about and increase their appreciation for research.
- 2.4 Relationship of the proposed course to courses offered in other departments:

This research-based lab course is more structured than the 399 "Independent Research" or senior project courses offered by departments in Ogden College.
- 2.5 Relationship of the proposed course to courses offered in other institutions:

This course is a replication of the *Research Methods* course in the University of Texas at Austin's UTeach program.

3. Discussion of proposed course:

3.1 Course objectives:

The goal of this lab-based course is to provide future teachers with an opportunity to design and carry out a number of brief math or science inquiries and an additional extended research project. Students will acquire and apply the skills used by professional researchers as they carry out scientific inquiries.

3.2 Content outline:

Hypothesis driven research, hypotheses testing
 Use of experiments to answer scientific questions
 Use of computer based data acquisition and analysis tools
 Mathematical modeling of scientific phenomena
 Design of experiments to reduce systematic and random errors
 Use of statistics to interpret experimental results and deal with sampling errors
 Laboratory safety and ethical treatment of human subjects
 Finding and reading articles in the current scientific literature
 Presenting scientific information: plotting, writing, research talks, publishing
 Applying scientific arguments in matters of social importance

3.3 Student expectations and requirements:

Students will be able to:	Evidence (Student Products)
1. Use experiments to answer scientific questions.	Four research inquiries on separate topics designed and carried out by student: 1. brief home inquiry 2. inquiry using high school lab equipment 3. survey involving human subjects 4. extended laboratory inquiry
2. Use computer based data acquisition and analysis tools	▪ inquiries 2 and 4
3. Model scientific phenomena mathematically.	▪ homework assignments ▪ personalized modeling assignments as part of inquiries 2 and 4
4. Design experiments to reduce systematic and random errors.	▪ papers on inquiries 2, 3, and 4 ▪ proposals for inquiries 2 and 4
5. Use statistics to interpret experimental results and deal with sampling errors.	▪ homework assignments ▪ brief in-class papers ▪ write-ups for inquiries 2, 3, and 4
6. Practice ethical treatment of human subjects.	▪ certificate demonstrating completion of human subjects training ▪ satisfactory completion of inquiry 3 which involves human subjects
7. Apply safe laboratory procedures.	▪ instructor observations during labs
8. Find and read articles in the current scientific literature.	▪ homework assignments ▪ performance assessed during debate
9. Apply scientific arguments in matters of social importance.	▪ debates carried out in class in teams at end of semester
10. Write scientific papers.	▪ four written lab reports
11. Review scientific papers.	▪ inquiries 2 and 4, requiring students to evaluate each other in pairs and turn in their evaluations as homework assignment

12. Present scientific work orally.	▪ oral report on inquiries 2 and 4 ▪ debate presentation
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- 3.4 Tentative texts and course materials:
Course packet of selected readings, prepared by the instructor

4. Resources:

Library resources: See attached library resource form and bibliography
Computer resources: No new additional resources required

5. Budget implications:

- 5.1 Proposed method of staffing: Current faculty from the departments of Biology, Chemistry, Geography & Geology, Mathematics, and Physics & Astronomy
- 5.2 Special equipment needed: None
- 5.3 Expendable materials needed: Initially funded through SKyTeach
- 5.4 Laboratory materials needed: Initially funded through SKyTeach

6. Proposed term for implementation: Spring 2010

7. Dates of prior committee approvals:

Department of Curriculum & Instruction: 25 April 2008

CEBS Curriculum Committee: 2 December 2008

Professional Education Council: 10 December 2008

Undergraduate Curriculum Committee: 01/22/09

University Senate: _____

Proposal Date: 3/12/2008

**College of Education and Behavioral Sciences
Department of Curriculum and Instruction
Proposal to Create a New Course
(Action Item)**

Contact Person: David Erbach, david.erbach@wku.edu, (270) 745-3652

1. Identification of proposed course:

- 1.1 Course prefix and number: SMED 470
- 1.2 Course title: Project-Based Instruction
- 1.3 Abbreviated course title: Project-Based Instruction
- 1.4 Credit hours and contact hours: 3.0
- 1.5 Type of course: A (applied learning)
- 1.6 Prerequisite: SMED 320
- 1.7 Course catalog listing:
Methods, techniques, and technologies used to implement and assess problem-based investigations in math and science classrooms. Fieldwork required; students are responsible for arranging their own transportation to sites.

2. Rationale:

- 2.1 Reason for developing the proposed course:
This course is part of SKyTeach, a National Math and Science Initiative (NMSI) funded program to replicate the University of Texas at Austin's UTeach curriculum for preparation of math and science teachers. Adopting this sequence meets NMSI's requirement for replication of UTeach at WKU. Project-based instruction engages learners in exploring authentic, important, and meaningful questions of real concern to students. Through a dynamic process of investigation and collaboration, and using the same processes and technologies that real scientists use, students in the proposed course will work in teams to formulate questions, make predictions, design investigations, collect and analyze data, make products, and share ideas. Pre-service teachers will learn fundamental science and math principles that apply to their students' daily lives.
- 2.2 Projected enrollment in the proposed course:
Based on enrollments in current math and science teacher education sequence and the successful recruitment of math/science majors for the one-time-only fall 2008 sections of SMED 101, 60 students per year are expected to enroll.
- 2.3 Relationship of the proposed course to courses now offered by the department:
This course will combine aspects of SEC 351, SEC 352, MGE 385, MGE 485, MGE/SEC 477, and MGE/SEC 479.
- 2.4 Relationship of the proposed course to courses offered in other departments:
No other department offers a similar introduction to math and science education for middle grade and secondary teachers.
- 2.5 Relationship of the proposed course to courses offered in other institutions:
This course is a replication of the *Project-Based Instruction* course in the University of Texas at Austin's UTeach program.

3. Discussion of proposed course:

- 3.1 Course objectives:
The student who is successful in this course will: understand the theoretical implications of

project-based instruction; achieve competency with important learning technologies; be able to practically apply project-based instruction within a classroom setting; and establish successful project-based learning environments in a field research setting.

Students will integrate appropriate items within their project-based lessons to demonstrate an awareness of and plan appropriately for the needs of diverse learners and multicultural awareness and settings in middle school and secondary classrooms.

Students will be presented with a theory-driven perspective accounting for what is understood about how people learn and how project-based instruction may be the best choice for bridging the gap between theory and practice. The technological and practical components will assist students in developing project-based units. The field experiences involve both observation of well-implemented project-based instruction in local schools and implementation of project-based instruction with students on extended study trips, such as to Mammoth Cave National Park or the Green River Biological Preserve.

3.2 Content outline:

Theoretical Implications

Importance of Project-Based Instruction (PBI) in terms of students' cognitive development, equity, and motivation.

Applications of educational theory as it relates to classroom practice in the area of project-based instruction.

Distinction between project-based and other instructional approaches and decide which approach best fits instructional goals.

Usefulness of technology in achieving learning objectives and select appropriate resources for student use.

Examples of project-based instruction in math or science and analyze those in terms of Krajcik's, Boaler's and Polman's models for PBI.

Ways in which students with varying ability levels and students from different cultural backgrounds learn optimally.

Importance of cultural awareness and sensitivity in planning, organizing, and teaching with Project Based Instruction.

Technological Competencies

Technology to develop projects (e.g., concept mapping software, video editing software)

Integrate relevant technology into curricular units (e.g., Internet, simulations, data analysis packages, modeling software, etc.,)

Practical Application

Use design principals to develop interdisciplinary, two to three-week project-based units for high school classes.

Develop alternative assessments appropriate for project-based instruction.

Discuss lab safety and liability issues related to project based instruction and lab or field environments (OSHA regs, material data sheets, safe disposal, etc.).

Modifications for diverse learners

Field Experiences

Use inquiry methods with students in a project-based setting.

Compare and contrast observations of "real" project-based classrooms with those presented in readings and with theoretical models.

Demonstrate skill in setting up and managing wet lab and field project-based environments including set up, safety, and assessment.

3.3 Student expectations and requirements:

Students will be able to:	Evidence (Student Products)
1. Discuss the importance of project-based instruction in terms of students' cognitive development, equity, and motivation.	- project-based unit includes rationale & objectives - proposal to implement a project-based unit includes a rationale and potential impact
2. Reflect on applications of educational theory as it relates to classroom practice in the area of inquiry-based instruction.	grant proposal to implement inquiry-based unit includes a rationale and potential impact
3. Distinguish among project-based and other instructional approaches and decide which approach best fits instructional goals based on benefits and limitations of each.	project-based unit that includes benchmark lessons and an appropriate lesson sequence based on the best fit of different instructional approaches
4. Discuss the ways in which students with varying ability levels and students from different cultural backgrounds learn optimally.	- project-based unit includes methods for students with varying levels of ability - project-based unit includes methods for students with different learning styles
5. Reflect on the importance of cultural awareness and sensitivity in planning, organizing, and teaching with Project Based Instruction.	reading assignments and class discussions related to multiple intelligences, gifted students, learning styles, and cultural differences among students
6. Evaluate the usefulness of various technologies in achieving learning objectives.	- annotated list of relevant resources and technological tools for a project-based unit - presentation utilizing technology
7. Compare and contrast observations of "real" project-based classrooms with those presented in readings and with theoretical models.	on-line discussions of class readings and field observations of project-based classes
8. Critically analyze a lesson that they have taught, and revise and re-teach it.	mini-lesson study includes lesson plans; video of two lessons; reflections on planning, how the lesson went each time it was taught, and rationale for the changes.
9. Demonstrate skill in setting up and managing wet lab and field project-based environments.	assessment of video showing the student setting up and managing a wet lab and field project-based environments.
10. Work collaboratively to design a four- to six-week project-based unit for math and/or science courses.	project-based unit includes a calendar, rationale, objectives, theoretical basis for project, benchmark lessons, investigations, alternative assessment strategies, related resources, and technological tools
11. Design and teach lessons with adaptations for diverse learners.	- project-based unit that includes adaptations for diverse learners - assessment of video of two lessons

Students will be able to:	Evidence (Student Products)
12. Read and discuss safety standards (e.g. materials safety data sheets, OSHA regulations, how to dispose of chemicals safely, etc.)	• participation in class discussion on safety and liability issues • project-based unit includes safety precautions

3.4 Tentative texts and course materials:

J.S. Krajcik, C.M. Czerniak and C. Berger. 1998. *Teaching Children Science: A Project-Based Approach*. McGraw-Hill Companies

J. Boaler. 2002. *Experiencing School Mathematics: Traditional and Reform Approaches to Teaching and Their Impact on Student Learning*. Lawrence Erlbaum Associates

J.L. Polman. 2000. *Designing Project-Based Science. Connecting Learners through Guided Inquiry*. Teachers College Press, Columbia University

Gutstein, E. and B. Peterson. 2006. *Rethinking Mathematics: Teaching Social Justice by the Numbers*. Rethinking Schools, Ltd.

Bazin, M., M. Tamez, and the Exploratorium Teacher Institute. 2002. *Math and Science Across Cultures*. The Exploratorium

4. Resources:

4.1 Library resources: Library resource form and bibliography available upon request

4.2 Computer resources: No new additional resources required

5. Budget implications:

5.1 Proposed method of staffing: Current faculty

5.2 Special equipment needed: None

5.3 Expendable materials needed: Initially funded through SKyTeach

5.4 Laboratory materials needed: Initially funded through SKyTeach

6. Proposed term for implementation: Fall 2009

7. Dates of prior committee approvals:

Department of Curriculum & Instruction: 25 April 2008

CEBS Curriculum Committee: 2 December 2008

Professional Education Council: 10 December 2008

Undergraduate Curriculum Committee: _01/22/09_

University Senate: _____

Proposal Date: 10/10/2008

**College of Education and Behavioral Sciences
Department of Curriculum and Instruction
Proposal to Create a New Course
(Action Item)**

Contact Person: David Erbach, david.erbach@wku.edu, (270) 745-3652
Vicki H. Metzgar, vicki.metzgar@wku.edu, (270) 745-3343

1. Identification of proposed course:

- 1.1 Course prefix and number: SMED 489
- 1.2 Course title: SMED Student Teaching Seminar
- 1.3 Abbreviated course title: SMED Student Teaching Seminar
- 1.4 Credit hours and contact hours: 3.0
- 1.5 Type of course: A (applied learning)
- 1.6 Co requisite: MGE 490 or SEC 490
Prerequisite: Approved for admission to student teaching.
- 1.7 Course catalog listing:
Provides a bridge between the theory and practice of math and science teaching. Methods, techniques, technologies and issues pertinent to math and science instruction in middle grade and secondary classrooms. Field experiences in public schools and/or other appropriate settings away from campus are required. Pre-Service Teachers are responsible for their own transportation to designated or assigned sites.

2. Rationale:

- 2.1 Reason for developing the proposed course:
The SMED program is part of the larger SKyTeach initiative at Western Kentucky University, which has as its purpose the recruitment, preparation, and certification of increased numbers of mathematics and science teachers. This initiative, which grows out of the replication of the UTeach program at the University of Texas at Austin, will provide SMED students with a sequence of coursework, including student teaching and the seminar for student teachers, that is a pathway toward a major in Curriculum and Instruction, as well as a major in either mathematics or science content. The SMED major will enable students to acquire certification to teach in the State of Kentucky. This course will replace EDU 489 (presently required for all students enrolled in student teaching) for students seeking certification to teach mathematics and science, and it will meet all the requirements of EDU 489. Because SMED students in the SKyTeach cohort will take this class together, it will be more likely that SKyTeach students will complete the requirements of both majors and their entire program of studies.
- 2.2 Projected enrollment in the proposed course:
Based on enrollments in the current math and science teacher education sequence and the successful recruitment of math/science majors for the one-time-only Fall 2008 sections of SMED 101, at least 60 students per year are expected to enroll in entry-level SMED courses. Corresponding courses in the final semesters will experience similar growth in enrollment. When the SMED program is approved, it will become the sole path to math/science teacher certification for middle or high school mathematics and science.
- 2.3 Relationship of the proposed course to courses now offered by the department:

This course will differ from EDU 489 only to take advantage of the extensive, individualized, and on-going coaching the student teachers will have received through the previous SMED courses.

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

No other department offers a similar introduction to math and science education for middle grade and secondary teachers. The proposed course is part of the capstone experience (including student teaching) for teacher candidates, and in that sense it is similar to capstone courses offered in many other programs across the university.

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

This course is a replication of the student teaching seminar course in the University of Texas at Austin's UTeach program.

3. Discussion of proposed course:

3.1 Course objectives:

The student who is successful in this course will:

- understand the theoretical implications of project-based instruction;
- achieve competency with important learning technologies;
- be able to practically apply project-based instruction within a classroom setting; and
- establish successful project-based learning environments in a field research setting.

3.2 Content outline:

SMED 489 will closely parallel the content of the current EDU 489 Student Teaching Seminar. As such, the content will include:

- Factors that influence student learning
- Situational leadership
- Mastery learning strategies
- Broad-based and Content-specific themes in teaching
- Lesson content and organization
- Differentiation of instruction for students with special needs
- Analysis of data
- Pre-assessment, formative assessment, and summative assessment
- Developing student creativity, problem-solving skills, and critical thinking skills
- Behavior management
- Moral, ethical, and legal issues in classrooms and school settings
- Certification and employment issues in education
- Completion of the capstone Teacher Work Sample project

3.3 Student expectations and requirements:

Students will be able to:	Evidence (Student Products)
1. Design instruction appropriate for all students that reflects an understanding of relevant content and is based on continuous and appropriate assessments	▪ Teacher Work Sample (TWS)-Contextual Factors, Learning Goals, Assessment Plan, Design for Instruction, Sample assessments and student artifacts ▪ Seminar Reflections, Assessment Artifacts
2. Create a classroom environment of respect and rapport that fosters a positive climate for learning, equity, and excellence.	▪ TWS- Contextual factors, Instructional Design, Instructional Decision Making ▪ Written classroom rules and procedures ▪ Seminar Reflections
3. Promote student learning by providing	▪ TWS- Design for Instruction, Instructional

responsive instruction that makes use of effective communication techniques, instructional strategies that actively engage students in the learning process, and timely high-quality feedback	Decision Making , Analysis of learning. Reflection ▪ Seminar Reflections, Sample Assessment
4. Fulfill professional roles and responsibilities and adhere to legal and ethical requirements of the profession.	▪ Participation in campus professional development days ▪ Seminar Reflections, Resume Submissions, Job fair Reports

3.4 Tentative texts and course materials: There are no texts required for this course.

4. Resources:

- 4.1 Library resources: see attached library resource form and bibliography
- 4.2 Computer resources: no additional resources required

5. Budget implications:

- 5.1 Proposed method of staffing: current staff
- 5.2 Special equipment needed: none
- 5.3 Expendable materials needed: initially funded through SKyTeach
- 5.4 Laboratory materials needed: initially funded through SKyTeach

6. Proposed term for implementation: Spring 2010

7. Dates of prior committee approvals:

Department of Curriculum & Instruction: 31 October 2008

CEBS Curriculum Committee: 2 December 2008

Professional Education Council: 10 December 2008

Undergraduate Curriculum Committee: 01/22/09

University Senate: _____

Attachment: Bibliography, Library Resources Form, Course Inventory Form

Proposal Date: 8/8/2008

**College of Education and Behavioral Sciences
Department of Curriculum and Instruction
Proposal to Create a New Major Program
(Action Item)**

Contact Person: Richard Gelderman, richard.gelderman@wku.edu, 745-6203
Vicki H. Metzgar, vicki.metzgar@wku.edu, 745-3343

1. Identification of program:

- 1.1 Program title: Science and Mathematics Education
- 1.2 Degree: Bachelor of Science
- 1.3 Classification of Instructional Program (CIP) Code: 13.1206
- 1.4 Required hours in proposed major program: 34
- 1.5 Special information:

The Science and Math Education (SMED) major may be completed only by students seeking certification as middle grades or secondary grades science or mathematics teachers. Each student must also meet all the requirements to earn a science or mathematics content major in addition to the SMED major. The SMED program is a shared program involving faculty from the College of Education and Behavioral Sciences, the Ogden College of Science and Engineering, and the Potter College of Arts and Letters. Oversight of the SMED program will be the responsibility of the SKyTeach Program Curriculum Committee, and SMED courses will be administered through the Department of Curriculum and Instruction within the College of Education and Behavioral Sciences.

- 1.6 Program admission requirements:
Earn a grade of C or higher in SMED 101 and SMED 102, and meet requirements for admission to teacher education.

- 1.7 Catalog description:
Students seeking certification as middle grades (5 - 9) or secondary grades (8 -12) science or mathematics teachers must complete both the Science and Mathematics Education program (SMED, reference number tbcd) and one of the following: the Middle School Science Education program (reference number tbcd), the Middle Grades Mathematics Education program (reference number tbcd), or a teacher certifiable science or mathematics content major. This combination of programs leads to a bachelor's degree with a minimum of two majors. Completion of the two programs, as well as the successful completion of the current requirements to be recommended for certification, will qualify a student for Kentucky middle grades science or mathematics certification (Grades 5-9) or secondary certification (Grades 8-12) in one of the following approved science or mathematics secondary content fields: Biology, Chemistry, Earth and Space Science, Mathematics, or Physics. Students seeking admission to the SMED program must earn a grade of C or higher in SMED 101 and SMED 102, and meet requirements for admission to teacher education.

Students seeking academic advising with regard to preparation as a science or mathematics teacher should contact the SKyTeach office, Hardin Planetarium, (270) 745-3900, or refer to the SKyTeach web site: <http://skyteach.wku.edu/> for additional information.

The Science and Mathematics Education program requires completion of 34 hours of professional education courses. The recommended General Education mathematics course is either MATH 117 or MATH 118. The required courses are:

- SMED 101 Introduction to Inquiry-Based Approaches to Teaching - 1 hr
- SMED 102 Introduction to Inquiry-Based Lesson Design - 2 hrs
- SMED 210 Knowing and Learning in Mathematics and Science - 3 hrs
- SMED 320 Classroom Interactions - 3 hrs
- EXED 330 Intro to Exceptional Education: Diversity in Learning - 3 hrs
- SMED 340 Perspectives on Science and Mathematics - 3 hrs
- SMED 360 Research Methods for Science and Math Teachers - 3 hrs
- SMED 470 Project-Based Instruction - 3 hrs
- SMED 489 Student Teaching Seminar - 3 hrs
- MGE/SEC 490 Student Teaching - 10 hrs
(MGE 490 for students seeking middle grades certification
or SEC 490 for students seeking for students seeking secondary certification)

Program total: 34 semester hours

2. Rationale:

2.1 Reasons for developing the proposed major program:

The lack of certified science and mathematics teachers is a critical concern for schools in Kentucky and throughout the United States. Nationally about a third of high school mathematics students and two-thirds of those enrolled in physical science courses have teachers who did not major in the subject in college or are not certified to teach it. Students in the United States are falling behind in the essential subjects of mathematics and science, putting the nation's position in the global economy at serious risk. Only 29% of U.S. fourth grade students, 33% of eighth grade students, and barely 18% of 12th grade students perform at or above the proficient level in science. Within the nation, Kentucky students rank low in the bottom third. Kentucky is in the bottom 10% of the United States in workforce education, the number of scientists and engineers, the number of high tech businesses, and the number of high tech jobs. Competent and engaged teachers are needed to inspire students to pursue careers in mathematics and science, improve student achievement, and produce a better-prepared workforce.

Recognizing that teachers with strong content knowledge are essential for student achievement in mathematics and science, the University of Texas at Austin started the UTeach mathematics and science teacher preparation program in 1997. In the first ten years of operation, UTeach is responsible for growing the number of students seeking certification as middle or high school mathematics and science teachers from fewer than 45 students to over 450. Among the many important factors for this incredible improvement is the redesign of the UTeach education curriculum to focus specifically on mathematics and science teaching. Given the status of the teacher work force in middle grades and secondary science and mathematics in the State of Kentucky, it is apparent that institutions of higher education must look for new and different ways of recruiting and preparing these teachers. Given that UTeach has been so successful, the College of Education and Behavioral Sciences and the Ogden College of Science and Engineering have collaborated on a plan to train mathematics and science teachers in a new SMED program that will follow the UTeach model.

For some students, the decision to enter teaching does not begin with an interest in education, but with an interest in pure mathematics and science. These students will be recruited early in their college career and supported throughout to become talented and highly qualified Middle Grades

or Secondary mathematics or science teachers. SMED graduates will have career opportunities beyond those of traditional Science and Mathematics Education graduates because they will have been grounded in content to a greater extent than current graduates, and they will carry a double major with them at graduation; a mathematics or science major to go alongside the education major. Therefore, SMED graduates will be in demand as educators, as well as mathematics and science professionals.

SMED graduates will help ease the shortage of mathematics and science teachers currently being experienced across Kentucky and the United States. Goals of the proposed program are that these graduates will enter middle grades and secondary teaching better prepared, be mentored and supported better than current teacher education graduates, and retained at higher rates than is now happening. Thus, the proposed program will prepare more Kentuckians for postsecondary education.

Kentucky communities and economy benefit from increased numbers of highly qualified middle grades and secondary teachers of mathematics and science who return to their communities to teach and reside for their careers. Growing from this, communities will realize gains in workforce preparedness and opportunities for highly skilled and technical 21st century business growth.

SMED students will be recruited from high schools in Kentucky and neighboring states. As the number of students enrolling increases, the program will be capable of expanding to the extended campuses of the Western Kentucky University system. In the 10-year history of the UTeach program there has been a 10-fold increase in the number of students in the program and similar increases in the number of graduates from the program.

- 2.2 Projected enrollment in the proposed major program:
Based on the number of students currently seeking certification as middle grades or secondary grades science or mathematics teachers, and assuming growth comparable to that experienced by the University of Texas at Austin's UTeach program, the anticipated enrollment is about sixty students per year.
- 2.3 Relationship of the proposed program to other programs now offered by the department:
For prospective mathematics or science teachers this program will replace the current Middle Grades Education (MGE) major, and prospective secondary mathematics and science teachers will complete different professional education courses in place of the secondary education courses presently required. Middle grades science teachers will now be required to complete the requirements for both the SMED major and the Middle School Science Education (MSSE) major. Middle grades mathematics teachers will now be required to complete the requirements for both the SMED major and the Middle School Mathematics Education (MSME) major. Secondary grades science or mathematics teachers will now be required to complete the requirements for both the SMED major and a teacher certifiable major in Biology, Chemistry, Earth/Space Science, Mathematics, or Physics.
- 2.4 Relationship of the proposed major program to other university programs:
The SMED major is a replication of the University of Texas at Austin's nationally recognized UTeach program for science and mathematics teacher preparation. This program will replace middle grades and secondary mathematics and science certification programs as an improvement upon current programs.
- 2.5 Relationship of the proposed major program to similar programs offered elsewhere in Kentucky and in other states (including programs at benchmark institutions):

The SMED major is part of the replication of UTeach, the University of Texas at Austin's highly successful program to prepare larger numbers of qualified mathematics and science teachers. WKU is one of 10 national awardees funded by the National Math and Science Initiative as UTeach replication sites. No other program in Kentucky or surrounding states has been given permission to replicate the UTeach program. The other institutions selected to replicate UTeach outside of Texas are: Florida State University, Louisiana State University, Northern Arizona University, Temple University, University of California – Berkeley, University of California – Irvine, University of Colorado, University of Florida, and University of Kansas.

2.6 Relationship of the proposed major program to the university mission and objectives:

The SMED program is strongly supportive of at least three of the goals of the University:

- The SMED program will increase student learning by implementing a pathway to teacher certification for science and mathematics teachers that insures content expertise alongside pedagogical content knowledge.
- The SMED program will grow a high quality, diverse and engaged student body by placing students in classrooms alongside practicing teachers in the local community from the first semester of their involvement with the program.
- The SMED program will improve the quality of life in Kentucky and beyond by preparing highly qualified middle grades and secondary mathematics and science teachers who will reside in Kentucky communities and prepare a new generation of highly educated, technologically skilled citizens.
- The SMED program will better prepare students by connecting them to real world issues.

3. **Objectives of the proposed major program:**

The SMED program is designed so that a student completes middle grades or secondary teacher certification while also completing a major in mathematics or one of the science majors approved for teacher certification. The SMED program requirements are coordinated with state and national standards for teacher preparation in all the mathematics and science disciplines, including both process skills and content items. All the teacher competencies required by the Kentucky Educational Professional Standards Board, and assessed through the portfolio and final observation, are encompassed within the SMED course sequence.

The aim of the SMED program is to develop in prospective teachers a deep understanding of how to teach math and science content effectively. This explicitly goes beyond simply combining otherwise disjointed curricula for the mathematics and science content or pedagogy. The SMED program is designed to integrate content and pedagogy. Starting in their first semester of the program, SMED students will participate in carefully supervised field experiences in elementary classrooms where they will teach a minimum of three times, using research-based instructional materials to determine whether teaching is a suitable profession for them. Throughout the course sequence, students will experience a variety of field experiences and will be supervised by Master Teachers, with an emphasis on teaching in high-need schools. Students in the SMED courses will receive detailed written commentary on their teaching from mentor teachers in the field and, whenever possible, from course instructors and master teachers.

The SMED program will provide students with enhanced content knowledge and improved pedagogical content knowledge, which will improve students' opportunities for employment as mathematics and science teachers. Students completing the SMED program will have two majors. One major will be a content major in either mathematics or science. The second major will be in education, and will provide students with teacher certification in Kentucky.

4. Program description:

4.1 Curriculum:

SMED 101 Introduction to Inquiry-Based Approaches to Teaching - 1 hr
SMED 102 Introduction to Inquiry-Based Lesson Design - 2 hrs
SMED 210 Knowing and Learning in Mathematics and Science - 3 hrs
SMED 320 Classroom Interactions - 3 hrs
EXED 330 Intro to Exceptional Education: Diversity in Learning - 3 hrs
SMED 340 Perspectives on Science and Mathematics - 3 hrs
SMED 360 Research Methods for Science and Math Teachers - 3 hrs
SMED 470 Project-Based Instruction - 3 hrs
SMED 489 Student Teaching Seminar - 3 hrs
MGE/SEC 490 Student Teaching - 10 hrs
(MGE 490 for students seeking middle grades certification
or SEC 490 for students seeking for students seeking secondary certification)

The total numbers of required hours in the program is 34. All of the courses are new except EXED 330.

4.2 Accreditation, certification, approval, and/or licensure:

Once the SMED major is established, approval by Kentucky's Education Professional Standards Board (EPSB) will be requested. If the EPSB approves the program, then program graduates will be eligible for recommendations for the specific certifications that correspond to the programs that they complete, i.e., middle grades science certification (Grades 5-9), middle grades mathematics certification (Grades 5-9), or secondary certification (Grades 8-12) in one of five approved content areas: biology, chemistry, earth and space science, mathematics, or physics.

While the College of Education and Behavioral Sciences assumes primary responsibility for the professional preparation of teachers, the opportunity to educate teachers for the schools of the Commonwealth and the nation is shared by the university as a whole. Western Kentucky University is a charter member of the Renaissance Group for Teacher Education, which reflects its total campus commitment to quality teacher education programs.

WKU's professional education unit is accredited by the National Council for the Accreditation of Teacher Education (NCATE), and all teacher preparation programs at WKU are approved by Kentucky's Education Professional Standards Board.

4.3 Program delivery:

Courses in the SMED program will be taught by faculty from departments in the College of Education and Behavioral Sciences, Ogden College of Science and Engineering, and the Potter College of Arts and Letters. One of the unique aspects of the SMED program is its approach to teacher preparation. Students entering SMED courses are placed in teaching situations in their first semester of work. Throughout the program, students continue to experience teaching first hand, and they work with fully-trained, exceptional Master Teachers to reflect on and grow from their teaching experiences. Alongside this teaching experience, students are concurrently enrolled in rigorous content coursework in the Ogden College toward the completion of a major in mathematics or science.

5. Resources

5.1 Faculty:

SMED courses will be taught by faculty designated by WKU. The SMED program employs experienced secondary math and science teachers to supervise field experiences and teach courses in the program. These Master Teachers are tremendous examples and guides. They are

knowledgeable about what new teachers really face and need, and they are indispensable in providing connections with local school district teachers and administrators.

Faculty for the SMED program will include current members of the Department of Curriculum and Instruction from the College of Education and Behavioral Sciences; Ogden College of Science and Engineering Departments of Mathematics and Computer Science, Biology, Chemistry, Physics and Astronomy, and Geography and Geology; and Potter College of Arts and Letters, Departments of History and Philosophy and Religion.

5.2 Technological and electronic informational resources (e.g., databases, e-journals):

Existing resources are adequate.

5.3 Facilities and equipment:

The NMSI funding for replication of the UTeach program at WKU is supplemented by substantial contributions from the Ogden College of Science and Engineering and the College of Education and Behavioral Sciences. These sources have provided for substantial refurbishment and renovation of facilities and equipment in support of SMED courses.

6. **Proposed term for implementation:** Fall 2009

7. **Dates of prior committee approvals:**

Department of Curriculum & Instruction: 10/31/2008

CEBS Curriculum Committee: 12/02/2008

Professional Education Council: 12/10/2008

Undergraduate Curriculum Committee: 01/22/09

University Senate: _____

Attachment: Program Inventory Form

Proposal Date: October 14, 2008

**College of Health and Human Services
Department of Consumer and Family Sciences
Proposal to Revise A Certificate Program
(Action Item)**

Contact Person: Darbi Haynes-Lawrence, Ph.D., Darbi.Haynes-Lawrence@wku.edu, 745-2525

1. Identification of program:

- 1.1 Current program reference number: 1701
- 1.2 Current program title: Family Home Visiting Certificate
- 1.3 Credit hours: 12

2. Identification of the proposed program changes:

Move the CFS 496 Challenging Behavior course from the core to the electives area.

3. Detailed program description:

The Family Home Visiting Certificate will prepare students to provide home visiting services. Potential clients include those needing parenting skill, those at risk for abusing and neglecting their children, and/or those who need other support services. The courses required for this certificate program include the following. Students must earn at least a "C," to count towards the certification. ***A modification of the courses is as follows:**

Old Certificate Requirements	New Requirements
CFS 395 Child and Family Stress	CFS 395
CFS 494 Parenting Strategies	CFS 494
CFS 496 Challenging Behaviors	Elective chosen with advisor (3 hours)*
CFS 497 Home Visiting	CFS 497

***3 hours of coursework will be chosen by the student with assistance from their advisor. Below is a suggested list of elective options. Therefore the certificate will be 12 hours of coursework.**

CFS 311 (Family Relations)
CFS 385 (Exploring Adoption)
CFS 496 (Challenging Behaviors)
PSY 350 (Social Psychology)
PSY 355 (Cross Cultural Psychology)
SOCL 230 (Deviant Behavior)
SOCL 332 (Juvenile Delinquency)
SWRK 436 (Services to Children)
SWRK 356 (Services for Juvenile Offenders and Their Families)

4. Rationale for the proposed program change:

Reason for developing the proposed certificate program: This certificate is designed for two populations. The first is for those professionals in the field, who are potential WKU students seeking the certification only. There is a large need in the profession for people who conduct home visits through their employment positions, but have had no training in home visiting. The second population is current WKU students who wish to

strengthen their training and marketability in the fields of Child or Family Studies. This certificate is a natural transition for those enrolled in either the Child Studies or Family Studies concentrations within Family and Consumer Sciences. Graduates of these programs will be better prepared to enter employment positions where home visits are conducted, such as Head Start, Early Head Start, HANDS, Healthy Start, Parents as Teachers, Healthy Families America, etc. ***Since the creation and approval of this certificate, we have learned the impact this certificate can have on other fields of study. We have realized our focus was far too narrow. Thus, a revision of the courses is needed. In order to best meet the needs of students wanting this program, we are removing two courses that could change depending on the area of study of the specific student. Three courses (CFS 395, 494, and CFS 497) will stay constant. Each student, with help from their advisor, will select the remaining one course that will best prepare them for the population with which they will be working and conducting home visits. We have also discovered the course CFS 496 has far too many pre-requisites (CFS 492, which has a pre-req of CFS 191 and PSY 100) to feasibly meet the needs of students interested in only getting the Family Home Visiting Certificate.***

5. **Proposed term for implementation:** Summer 2009

6. **Dates of prior committee approvals:**

Consumer & Family Sciences Department: 11/3/08

CHHS Undergraduate Curriculum Committee 11/21/2008

Undergraduate Curriculum Committee 1/22/2009

University Senate _____

Attachment: Program Inventory Form

Proposal Date: November 17, 2008

**College of Health and Human Service
Department of Allied Health
Proposal to Create a New Course
(Action Item)**

Contact Person: Rebecca G. Tabor, becky.tabor@wku.edu , 745-3814/Daniel Carter, daniel.carter@wku.edu 745-2633

1. Identification of proposed course:

- 1.1 Course prefix (subject area) and number: DH 360
- 1.2 Course title: International Health and Human Service Learning Program
- 1.3 Abbreviated course title: IHHSLP
- 1.4 Credit hours and contact hours: 3-6
- 1.5 Type of course: Study Abroad
- 1.6 Prerequisites/corequisites: DH 111, DH 112, DH 201
- 1.7 Course catalog listing:
The purpose of this study abroad/service-learning course is to enhance student learning through the integration of academic and co-curricular experiences. This will be accomplished with active service to community partners, while encouraging civic engagement, community awareness, interdisciplinary teamwork and personal leadership development. May be repeated one time for a maximum of 6 credit hours.

2. Rationale:

- 2.1 Reason for developing the proposed course: Create opportunity for Dental Hygiene students to study abroad
- 2.2 Projected enrollment in the proposed course: 5-6
- 2.3 Relationship of the proposed course to courses now offered by the department: This course will require application of knowledge and skills learned in others DH courses.
- 2.4 Relationship of the proposed course to courses offered in other departments: This course will be offered interdisciplinary with other departments in the college.
- 2.5 Relationship of the proposed course to courses offered in other institutions: None currently, in the future, other institutions may become involved.

3. Discussion of proposed course:

3.1 Course objectives:

The student will be able to:

- Gain critical thinking, communication, and interpersonal skills by completing a service learning program in another country.
- Develop an appreciation for a global approach to issues through an exchange of information, ideas, and projects with a diverse team of service learning participants and communities in another country.
- Discuss health and human service, especially dental care, from a global perspective
- Gain an enhanced sense of global responsibility through the process of reflective learning while in another country to include completing a Reflection Journal, a final report, and a presentation.

3.2 Content outline:a. Introduction to Service Learning

- Introduction
- Mission
- Objectives
- What is Service Learning?
- What is Reflective Learning?
- b. Student Orientation
 - Introduction to the Country
 - Program History
 - IHHSLP 2009 Handbook
 - Characteristics of an Effective Team
 - Travel Conduct
 - Travel I.Q.
 - Travel Health Information
 - What to Bring
 - Frequently Asked Questions
- c. Service Learning in Another Country
 - Service Learning Projects
 - Dental Examinations
 - Dental Prophylaxis
 - Sealant/Varnish Application
 - Community Health Problems
 - Interaction with other disciplines
 - Itinerary
 - Accommodations
 - Daily Events
- d. Student Evaluation
 - Daily Reflections Journal
 - Service Learning Participation
 - Final Report
- e. Post-Trip Reflection Discussions
 - What were your observations during this course?
 - What did you learn from the experience?
 - How will this new learning experience benefit you personally or your discipline/field?
 - What are you going to do in the future, related to service learning?
 - What aspect of the service learning experience can be improved?
 - What aspect of the service learning experience did you like?

3.3 Student expectations and requirements:

- The student will be required to participate as a team member of the Health Sciences Unit.
- Service Learning Projects will include the following
 - Environmental Health Investigations
 - Dental Hygiene Services
 - Community Education
 - Assisting in the provision of medical and dental services (setting up medical unit, medical histories, and, if necessary, serving as a medical/dental assistant)
- Reflective Learning
 - Keep a Daily Reflections Journal

- Participate in all reflective learning meetings (these will occur each evening while on location)
- Take photographs of your learning experiences

3.4 Tentative texts and course materials: **IHHSLP 2009 Handbook**

4. Resources:

- 4.1 Library resources: none Computer resources: web sites
- 5.1 Proposed method of staffing: current faculty member
- 5.2 Special equipment needed: none
- 5.3 Expendable materials needed: will be acquired through donations and student payment for trip
- 5.4 Laboratory materials needed: none

6. Proposed term for implementation: Summer 2009

7. Dates of prior committee approvals:

Allied Health Department:	<u>11/17/2008</u>
CHHS Undergraduate Curriculum Committee:	<u>11/21/2008</u>
Undergraduate Curriculum Committee	<u>01/22/09</u>
University Senate	<u></u>

Attachment: Bibliography, Library Resources Form, Course Inventory Form

Proposal Date: 12/5/2008

**College of Health and Human Services
Department of Public Health
Proposal to Make Multiple Revisions to a Course
(Action Item)**

Contact Person: Gary English, gary.english@wku.edu, 5-2678

1. **Identification of course:**
 - 1.1 Current course prefix and number: PH 444
 - 1.2 Course title: Death Education
 - 1.3 Credit hours: 3
2. **Revise course title:**
 - 2.1 Current course title: Death Education
 - 2.2 Proposed course title: Death, Dying and Bereavement
 - 2.3 Proposed abbreviated title: Death, Dying and Bereavement
 - 2.4 Rationale for revision of course title: The addition of bereavement to the course title adds a dimension that is reflected in the course content but not in the previous title.
3. **Revise course number:** N/A
4. **Revise course prerequisites/corequisites/special requirements:** N/A
5. **Revise course catalog listing:**
 - 5.1 Current course catalog listing: A study of man's relationships to death and dying, designed to help people come to terms with their eventual death, cope with the death of loved ones, cope with death fears, and the prevention of suicide. Field trip required.
 - 5.2 Proposed course catalog listing: A study of the universal experience of dying and death, within societal, cultural, philosophical and spiritual contexts, designed to help people make sense of their mortality and the development of coping skills to assist with dealing with the death of loved ones.
 - 5.3 Rationale for revision of course catalog listing: Revisions more accurately reflect course content.
6. **Revise course credit hours:** N/A
7. **Proposed term for implementation:** Summer 2009
8. **Dates of prior committee approvals:**

Public Health Department/Division:	December 5, 2008
CHHS Undergraduate Curriculum Committee	_1/6/2009_____
Undergraduate Curriculum Committee	01/22/09_____
University Senate	_____

Attachment: Course Inventory Form

Proposal Date: 12/5/2008

**College of Health and Human Services
Department of Public Health
Proposal to Make Multiple Revisions to a Course
(Action Item)**

Contact Person: Gary English, gary.english@wku.edu, 5-2678

1. **Identification of course:**
 - 1.1 Current course prefix and number: PH 468
 - 1.2 Course title: Sexuality Education
 - 1.3 Credit hours: 3
2. **Revise course title:** N/A
3. **Revise course number:** N/A
4. **Revise course prerequisites requirements:**
 - 4.1 Current prerequisites requirements: 3 hours of undergraduate health education and 6 hours of undergraduate behavioral sciences.
 - 4.2 Proposed prerequisites requirements: PH 365 or permission of instructor
 - 4.3 Rationale for revision of course prerequisites requirements: The prerequisite of “undergraduate behavioral science” is too vague and PH 365 (Human Sexuality) is a more appropriate prerequisite for this course.
 - 4.4 Effect on completion of major/minor sequence: N/A
5. **Revise course catalog listing:**
 - 5.1 Current course catalog listing: Emphasis in this course is on planning, implementation and evaluation of school and community sexuality education programs. Health and policy issues which affect sexuality and sexual behavior are addressed along with analysis of contemporary health issues with sexual dimensions.
 - 5.2 Proposed course catalog listing: A critical review of programs designed to promote sexuality education in community and school settings. Forces that impact on the adoption of various curricula and the development of new curricula are examined. Students are taught to utilize scientific and cultural considerations in preparing and adopting curricula for different populations
 - 5.3 Rationale for revision of course catalog listing: Revisions more accurately reflect course content.
6. **Revise course credit hours:** N/A
7. **Proposed term for implementation:** Fall 2009
8. **Dates of prior committee approvals:**

Public Health Department/Division:	December 5, 2008
CHHS Undergraduate Curriculum Committee	1/6/2009_____
Undergraduate Curriculum Committee	01/22/09
University Senate	_____

Attachment: Course Inventory Form

Proposal Date: 12/5/2008

**College of Health and Human Services
Department of Public Health
Proposal to Make Multiple Revisions to a Course
(Action Item)**

Contact Person: Gary English, gary.english@wku.edu, 5-2678

1. **Identification of course:**
 - 1.1 Current course prefix and number: PH 484
 - 1.2 Course title: Community Organization for Health Education
 - 1.3 Credit hours: 3
2. **Revise course title:** N/A
3. **Revise course number:** N/A
4. **Revise course prerequisites:**
 - 4.1 Current prerequisites: PH 483
 - 4.2 Proposed prerequisites: Junior Standing and permission of instructor
 - 4.3 Rationale for revision of course prerequisites:
The courses PH 483, 484, and 485 have, on occasion been offered the same semester, which brings the prerequisite into question. Faculty agreed that changing the prerequisite to Jr. Standing and permission of instructor is easier to adhere to and provides more flexibility.
 - 4.4 Effect on completion of major/minor sequence: Will assist students in flowing through the program more efficiently.
5. **Revise course catalog listing:**
 - 5.1 Current course catalog listing:
The purpose of this course is to study the role of the health educator in solving community health problems. Emphasis will be placed on proper methods and techniques of communications, processes by which a community identifies its needs and the importance of cultural and social factors in community organization and community development. Principles of community organization and planning as a process will be stressed. Includes field trips.
 - 5.2 Proposed course catalog listing:
Examines the role of the health educator in solving community health problems. Emphasis is placed on appropriate methods and techniques of communication, processes by which a community identifies its needs and the importance of cultural and social factors in community organization and community development. Principles of community organization and planning as a process will be stressed as well as the importance of public health policy.
 - 5.3 Rationale for revision of course catalog listing: Minor revisions reflect the addition of health policy and removal of field trips.
6. **Revise course credit hours:** N/A

7. **Proposed term for implementation:** Fall 2009

8. **Dates of prior committee approvals:**

Public Health Department/Division: December 5, 2008

CHHS Undergraduate Curriculum Committee _1/6/2009_____

Undergraduate Curriculum Committee 01/22/09

University Senate _____

Attachment: Course Inventory Form

Proposal Date: 7 October 2008

**Potter College of Arts and Letters
Department of English
Proposal to Revise Course Credit Hours
(Action Item)**

Contact Person: karen.schneider@wku.edu 5-3046

1. Identification of course:

- 1.1 Current course prefix (subject area) and number: ENG 299
- 1.2 Course title: Introduction to English Studies
- 1.3 Credit hours: 2

2. Proposed course credit hours: 3

3. Rationale for the revision of course credit hours:

When we first designed this class, we thought we could include everything we needed to in a 2 hr/week setting. We have taught this class for two years now and have come to realize that we cannot; to include all the necessary material, we find ourselves asking our students to do as much work as they would in a 3 hr. class when they are receiving only 2 hrs. credit. Clearly this is unfair and in some cases has led us to compromise the integrity of the course requirements. Since the students have to take the class anyway, making it a 3 hr course will not measurably add to their load, but it will be fairer to them and will make them less resistant to completing all the requirements.

4. Proposed term for implementation: 200930

5. Dates of prior committee approvals:

English Department: 10/24/2008

PCAL Curriculum Committee 11/6/08

Professional Education Council 11/12/08

Undergraduate Curriculum Committee 01/22/09

University Senate _____

Attachment: Course Inventory Form

Proposal Date: September 16, 2008

**Potter College of Arts & Letters
Department of Philosophy and Religion
Proposal to Create a New Course
(Action Item)**

Contact Person: Eric Bain-Selbo, eric.bain-selbo@wku.edu, 55744

1. Identification of proposed course:

- 1.1 Course prefix (subject area) and number: RELS 496
- 1.2 Course title: Senior Seminar
- 1.3 Abbreviated course title: SENIOR SEMINAR
- 1.4 Credit hours and contact hours: 3
- 1.5 Type of course: S
- 1.6 Prerequisites/corequisites: Senior standing and major in the department or consent of the instructor.
- 1.7 Course catalog listing: A capstone course designed for senior Religious Studies majors. Students will complete projects that demonstrate their research, writing, and analytical skills. Content areas of the seminar will vary by semester and instructor.

2. Rationale:

- 2.1 Reason for developing the proposed course: This proposal was developed with two primary objectives in mind—one related directly to students and one related indirectly to students. Primarily, the purpose of this course is to provide students with the opportunity to integrate the knowledge and skills they have learned as majors in the program into a single final project. Secondly, the projects will provide useful data for the program as part of its yearly assessment efforts. From an analysis of the projects and feedback from the leaders of the seminar, we will be able to identify our programmatic strengths and weaknesses—helping us to build upon the former and develop corrective measures for the latter.
- 2.2 Projected enrollment in the proposed course: 20, based on the average number of seniors in the program.
- 2.3 Relationship of the proposed course to courses now offered by the department: This course allows students to build upon the work they have done in a wide variety of courses in the Religious Studies curriculum.
- 2.4 Relationship of the proposed course to courses offered in other departments: None, except for the structural similarity it has to capstone courses in many departments at WKU.
- 2.5 Relationship of the proposed course to courses offered in other institutions: Capstone courses such as this one increasingly are becoming standard fare in religious studies programs throughout the country.

3. Discussion of proposed course:

- 3.1 Course objectives:
 - Utilize appropriate research skills and resources for the completion of the project.
 - Effectively articulate the principal issues or questions to be investigated as well as the conclusions reached through the research of those issues or questions.

- Demonstrate the skills of analysis that reflect the standards of the discipline.
- 3.2 Content outline: The content of the course will vary by instructor and semester. A standard requirement of all seminar offerings, however, will be a formal procedure of student production of project materials, faculty feedback (both written and in conferences), and student revision of project materials.
- 3.3 Student expectations and requirements: Students will be required to be active participants in seminar meetings; share their work with the group in order to receive comments and criticisms; and complete a final project that meets the course objectives.
- 3.4 Tentative texts and course materials: Vary by semester and instructor.

4. Resources:

- 4.1 Library resources: Existing resources will be sufficient.
- 4.2 Computer resources: Existing resources will be sufficient.

5. Budget implications:

- 5.1 Proposed method of staffing: Rotating among religious studies faculty.
- 5.2 Special equipment needed: None
- 5.3 Expendable materials needed: None
- 5.4 Laboratory materials needed: None

6. Proposed term for implementation: Fall 2009

7. Dates of prior committee approvals:

Religious Studies Program:	September 15, 2008
Department of Philosophy and Religion	November 12, 2008
Potter College Curriculum Committee	December 4, 2008
Undergraduate Curriculum Committee	01/22/09
University Senate	_____

Attachment: Course Inventory Form. Bibliography and Library Resources Form are not applicable.

Proposal Date: September 1, 2008

**Potter College of Arts & Letters
Department of Philosophy and Religion
Proposal to Revise A Program
(Action Item)**

Contact Person: Eric Bain-Selbo, eric.bain-selbo@wku.edu, 745-5744

1. Identification of program:

- 1.1 Current program reference number: 769
- 1.2 Current program title: Religious Studies
- 1.3 Credit hours: 30

2. Identification of the proposed program changes:

The revised major program includes the addition of RELS 496 as a required course, the elimination of RELS 102 as a required course in the major, two additional courses in the “Religious Texts” category, and the increase of 400-level hours from 3 to 6. In addition, the “Religious Traditions” requirement will be called simply the “Traditions” requirement; and there is some rewording of the description of electives. Finally, RELS 308 is added to the “Traditions” category.

3. Detailed program description:

Current Program	Proposed Program
The major in religious studies (reference number 769) requires a minimum of 30 semester hours and leads to a Bachelor of Arts degree. At least 15 hours must be in courses numbered 300 or above, with at least 3 hours at the 400-level. A minor or second major is required.	The major in religious studies (reference number 769) requires a minimum of 30 semester hours and leads to a Bachelor of Arts degree. At least 15 hours must be in courses numbered 300 or above, with at least 6 hours at the 400-level. A minor or second major is required.
<u>I. Introduction (3 hours)</u> RELS 102: Introduction to Religious Studies	<u>I. Religious Texts (3 hours)</u> RELS 100: The New Testament OR RELS 101: The Old Testament/Hebrew Scriptures OR RELS 300: The Life of Jesus OR RELS 301: Life and Teaching of Paul
<u>II. Religious Texts (3 hours)</u> RELS 100: The New Testament OR RELS 101: The Old Testament/Hebrew Scriptures	<u>II. Traditions (9 hours)</u> RELS 302: Buddhist Religious Traditions RELS 303: Hindu Religious Traditions RELS 304: Judaic Religious Traditions RELS 305: Christian Religious Traditions RELS 306: Islamic Religious Traditions RELS 307: Native American Religious Traditions RELS 308: East Asian Religious Traditions
<u>III. Religious Traditions (9 hours)</u> RELS 302: Buddhist Religious Traditions RELS 303: Hindu Religious Traditions RELS 304: Judaic Religious Traditions RELS 305: Christian Religious Traditions RELS 306: Islamic Religious Traditions RELS 307: Native American Religious Traditions	<u>III. Senior Seminar (3 hours)</u> RELS 496

<u>IV. Electives (15 hours)</u> Electives may be selected from among the total offerings in RELS, including additional courses in II-III and up to 6 hours of language courses.	<u>IV. Electives (15 hours)</u> Electives may be selected from among the total offerings in RELS, including additional courses in I-II and up to 6 hours of departmentally-approved language courses and up to 6 hours of departmentally-approved study abroad courses.
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4. **Rationale for the proposed program change:** The changes in the newly proposed program stem primarily from the inclusion of a new senior seminar (RELS 496) that will serve as the capstone experience for religious studies majors. As a consequence of adding the seminar, RELS 102 is deleted as a required course in order to maintain the major at 30 credit hours. Also, the department wants to ensure that students still take a 400-level offering in addition to the senior seminar. Thus, the new program requires two courses at the 400-level as opposed to just the one in the old program. The addition of RELS 300 and 301 to the Religious Texts category is based on our assessment that these courses fulfill the objectives of that requirement. The re-wording of the description of electives is to ensure that students only use language courses relevant to the religious studies program (e.g., Biblical Greek, Hebrew, Pali, Sanskrit, etc.) as RELS electives and that we clearly acknowledge that study abroad courses can be used toward the completion of the program. Finally, RELS 308 clearly fits the intent of the “Traditions” category and should be included as an option.

5. **Proposed term for implementation and special provisions (if applicable):** Fall 2009. Students who entered the program prior to Fall 2009 will be encouraged to take the senior seminar, but will not be required to do so.

6. **Dates of prior committee approvals:**

Religious Studies Program	September 15, 2008
Department of Philosophy and Religion	November 12, 2008
Potter College Curriculum Committee	December 4, 2008
Undergraduate Curriculum Committee	01/22/09
University Senate	_____

Attachment: Program Inventory Form

Proposal Date: September 16, 2008

**Potter College of Arts & Letters
Department of Philosophy and Religion
Proposal to Revise A Program
(Action Item)**

Contact Person: Eric Bain-Selbo, eric.bain-selbo@wku.edu, 745-5744

1. Identification of program:

- 1.1 Current program reference number: 447
- 1.2 Current program title: Religious Studies
- 1.3 Credit hours: 21

2. Identification of the proposed program changes: The revised minor program includes the deletion of RELS 102 as a required course (this course was deleted from the religion major as well), two additional courses in the “Religious Texts” category, and the addition of RELS 308 to the “Religious Traditions” category. In addition, the “Religious Traditions” requirement will be called simply the “Traditions” requirement; and there is some rewording of the description of electives.

3. Detailed program description:

Current Program	Proposed Program
The minor in religious studies (reference number 447) requires a minimum of 21 hours. At least 12 hours must be taken in courses numbered 300 or above.	The minor in religious studies (reference number 447) requires a minimum of 21 hours. At least 12 hours must be taken in courses numbered 300 or above.
<u>I. Introduction (3 hours)</u> RELS 102: Introduction to Religious Studies	<u>I. Religious Texts (3 hours)</u> RELS 100: The New Testament OR RELS 101: The Old Testament/Hebrew Scriptures OR RELS 300: The Life of Jesus OR RELS 301: Life and Teaching of Paul
<u>II. Religious Texts (3 hours)</u> RELS 100: The New Testament OR RELS 101: The Old Testament/Hebrew Scriptures	
<u>III. Religious Traditions (6 hours)</u> RELS 302: Buddhist Religious Traditions RELS 303: Hindu Religious Traditions RELS 304: Judaic Religious Traditions RELS 305: Christian Religious Traditions RELS 306: Islamic Religious Traditions RELS 307: Native American Religious Traditions	<u>II. Traditions (9 hours)</u> RELS 302: Buddhist Religious Traditions RELS 303: Hindu Religious Traditions RELS 304: Judaic Religious Traditions RELS 305: Christian Religious Traditions RELS 306: Islamic Religious Traditions RELS 307: Native American Religious Traditions RELS 308: East Asian Religious Traditions
<u>IV. Electives (9 hours)</u> Electives may be selected from among the total offerings in RELS, including additional courses in II-III and up to 6 hours of language courses.	<u>III. Electives (9 hours)</u> Electives may be selected from among the total offerings in RELS, including additional courses in I-II and up to 6 hours of departmentally-approved language courses and up to 3 hours

	of departmentally-approved study abroad courses.
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4. Rationale for the proposed program change: The changes in the newly proposed program are related to changes in the major program, where a senior seminar was added and RELS 102 dropped as a requirement. We did not think RELS 102 to be critical to the major; we likewise do not consider it critical to the minor. As a consequence of dropping RELS 102 from the minor, we have increased the required credit hours for the “Traditions” requirement from six to nine in order to ensure that students have an adequate introduction to a number of world religions. The addition of RELS 300 and 301 to the Religious Texts category is based on our assessment that these courses fulfill the objectives of that requirement. Finally, the re-wording of the description of electives is to ensure that students only use language courses relevant to the religious studies program (e.g., Biblical Greek, Hebrew, Pali, Sanskrit, etc.) as RELS electives and that we clearly acknowledge that study abroad courses can be used toward the completion of the program.

5. Proposed term for implementation and special provisions (if applicable): Fall 2009. Students who entered the program prior to Fall 2009 will be encouraged to take the senior seminar, but will not be required to do so.

6. Dates of prior committee approvals:

Religious Studies Program:	September 22, 2008
Department of Philosophy and Religion	November 12, 2008
Potter College Curriculum Committee	December 4, 2008
Undergraduate Curriculum Committee	01/22/09
University Senate	_____

Attachment: Program Inventory Form

Proposal Date: November 5, 2008

**Potter College of Arts and Letters
Department of English
Proposal to Create a New Minor Program
(Action Item)**

Contact Person: Jane Fife, jane.fife@wku.edu, 745-3634

1. Identification of program:

- 1.1 Program title: Minor in Professional Writing
- 1.2 Required hours in minor program: 21 hours
- 1.3 Special information:
- 1.4 Catalog description: The Minor in Professional Writing requires a minimum of 21 semester hours. Requirements include either ENG 306 or 307; ENG 401, 402, 412, 414, and 415; and one of the following courses: ENG 301, 369, 410, or 411. ENG 414 Professional Writing Capstone should not be taken before completion of at least 12 hours toward the minor. No more than 6 hours taken for the English major (either the Literature or the Creative Writing Concentration) may apply toward the Professional Writing minor.

2. Rationale:

- 2.1 Reason for developing the proposed minor program: Our current writing minor does not focus on either creative or professional writing. Students are not well served by this lack of focus, so we are eliminating the general Writing Minor and replacing it with two specialized minor programs: Professional Writing and Creative Writing.
- 2.2 Projected enrollment in the proposed minor program: 25+ students (based on 20% of our current number of writing minors plus interest expressed by Business majors).
- 2.3 Relationship of the proposed minor program to other programs now offered by the department: The Professional Writing minor could offer Literature or Creative Writing majors a marketable minor.
- 2.4 Relationship of the proposed minor program to other university programs: The Professional Writing Minor would not duplicate offerings of other programs. This minor would be a good choice for students in any major requiring polished composition and rhetorical skills, such as pre-law, History, Political Science, Communication, Advertising, Public Relations, Leadership Studies, and many Business majors, including Computer Information Systems, Management, and Marketing.
- 2.5 Similar minor programs offered elsewhere in Kentucky and in other states (including programs at benchmark institutions): Morehead (24 hours), Northern Kentucky (21 hours), Eastern Illinois (23 hours), Northern Iowa (24 hours), Western Illinois (18 hours), and Youngstown State (18 hours) offer minors in professional writing.
- 2.6 Relationship of the proposed minor program to the university mission and objectives: Strong writing skills that focus on the clear and persuasive communication of ideas are important in order for students to be “productive, engaged, and socially responsible citizen-leaders in a global society.”

3. Objectives of the proposed minor:

Students will be prepared to adapt to the myriad rhetorical situations faced by professional writers through instruction in rhetorical concepts and textual design principles. In the capstone course—ENG 414, Advanced Professional Writing

Workshop—they will develop a portfolio of their professional writing which will help them display their skills to potential employers. The program will prepare students to succeed as thoughtful, resourceful, and persuasive writers in a diversity of fields.

4. Curriculum:

Required:

English 306 Business Writing OR English 307 Technical Writing	3 hours
English 401 Advanced Composition	3 hours
English 402 Editing and Publishing	3 hours
English 412 History of Rhetoric	3 hours
English 414 Advanced Professional Writing Workshop	3 hours
English 415 Writing and Technology	3 hours

One Elective:

English 301 Argument and Analysis	3 hours
English 369 Cooperative Education in English I	3 hours
English 410 Theory and Practice in Writing Instruction	3 hours
English 411 Directed Writing	3 hours

5. **Budget implications:** None. Minor consists of existing courses which will be taught by current faculty.

6. **Proposed term for implementation:** Fall 2009

7. **Dates of prior committee approvals:**

English Department/Division:	__11/21/08__
PCAL Curriculum Committee	__12/4/08__
Undergraduate Curriculum Committee	01/22/09
University Senate	_____

Attachment: Program Inventory Form

Proposal Date: October 16, 2008

**University College
Leadership Studies Program
Proposal to Create a New Course
(Action Item)**

Contact Person: Dr. Cecile Garmon, cecile.garmon@wku.edu, 745-8973.

1. Identification of proposed course:

- 1.1 Course prefix (subject area) and number: LEAD 325
- 1.2 Course title: Leading Change
- 1.3 Abbreviated course title: Leading Change
- 1.4 Credit hours and contact hours: 3 credit hours
- 1.5 Type of course: S- Seminar
- 1.6 Prerequisites: LEAD 200, Introduction to Leadership Studies, or instructor's permission
- 1.7 Course catalog listing: Study of processes and skills impacting a leader's ability to implement change, emphasizing the analysis of various existing models to produce sound solutions.

2. Rationale:

- 2.1 Reason for developing the proposed course: LEAD 325 would become a required course in a potential Leadership concentration for the Systems Management degree and for future leadership programs. Discussions with constituents at branch campuses, especially in the Fort Knox area, indicate demand for leadership-focused undergraduate programs. In-depth knowledge of leading change in various contexts provides students with needed skills to lead through times of change.
- 2.2 Projected enrollment in the proposed course: 20 to 30 per semester.
- 2.3 Relationship of the proposed course to courses now offered by the department: there are no courses offered by the department that are similar. This course contributes to a stronger core for leadership development.
- 2.4 Relationship of the proposed course to courses offered in other departments: There are no other undergraduate courses at WKU that examine this material with the same focus upon leadership.
- 2.5 Relationship of the proposed course to courses offered in other institutions:
 - United States Military Academy: PL 479 Leading Organizations Through Change
 - University of Connecticut: MGMT 383 Organizational Development and Managing Change
 - University of Richmond, Jepson School of Leadership: LDSP 356 Leading Change
 - Wilmington University: ORG 311 Organizational Change and Development

3. Discussion of proposed course:

- 3.1 Course objectives. Students will:
 - Identify the types of change common in an organization;
 - Describe the change concepts potentially relevant to society;
 - Analyze the sources of and forces related to resistance to change, using appropriate theoretical models and relevant case studies;
 - Identify and analyze the role of leaders in managing change;

- Evaluate the effects of alternative strategies for managing or leading change using appropriate change concepts and theoretical orientations.

3.2 Content outline:

- Distinguish between different types and terminology of organizational change;
- Analyze important models of change;
- Describe and explain the steps involved to manage organizational change effectively in a variety of contexts and settings;
- Understand the change process;
- Identify reactions to and products of organizational change.

3.3 Student expectations and requirements: Student expectations may include reading assigned journal articles and text materials, participating actively in class discussions, leading class discussion on assigned topic, completing written reviews of literature, and developing their personal leadership objectives. A midterm and a final exam may assess student understanding of course content.

3.4 Tentative texts and course materials:

Collins, Jim (2001). *Good to Great*. New York: HarperCollins.

Gardner, H. (2004). *Changing minds: The art and science of changing our own and other people's minds*. Cambridge: Harvard Business School Press.

Kotter, John P. (1996). *Leading Change*. Boston: Harvard Business School Press

Palmer, I., Dunford, R. and Akin, G. (2006). *Managing organizational change: A multiple perspectives approach*. New York: McGraw Hill/Irwin.

4. **Resources:** adequate.

4.1 Library resources: adequate.

4.2 Computer resources: adequate.

5. **Budget implications:** none.

5.1 Proposed method of staffing: As courses in the Leadership Studies program are interdisciplinary, staff may be drawn from appropriate areas.

5.2 Special equipment needed: none.

5.3 Expendable materials needed: none.

5.4 Laboratory materials needed: none.

6. **Proposed term for implementation:** Fall 2009.

7. **Dates of prior committee approvals:**

Center for Leadership Excellence October 16, 2008

University College Curriculum Committee December 1, 2008

Undergraduate Curriculum Committee 01/22/09

University Senate _____

Attachment: Bibliography, Library Resources Form, Course Inventory Form

Proposal Date: October 16, 2008

**University College
Leadership Studies
Proposal to Create a New Course
(Action Item)**

Contact Person: Dr. Cecile Garmon, cecile.garmon@wku.edu, 745-8973

1. Identification of proposed course:

- 1.1 Course prefix (subject area) and number: LEAD 330
- 1.2 Course title: Leadership Ethics and Decision-Making
- 1.3 Abbreviated course title: Lead. Ethics/Decision-Making
- 1.4 Credit hours and contact hours: 3 credit hours
- 1.5 Type of course: S—Seminar
- 1.6 Prerequisites: LEAD 200, Introduction to Leadership Studies, or instructor's permission
- 1.7 Course catalog listing: Study of contemporary ethical and decision-making issues facing leaders; emphasis on examining and analyzing ethical issues for sound leadership solutions.

2. Rationale:

- 2.1 Reason for developing the proposed course: LEAD 330 would become a required course in a potential Leadership concentration for the Systems Management degree and for future leadership programs. Discussions with constituents at branch campuses, especially in the Fort Knox area, indicate demand for leadership-focused undergraduate programs. Knowledge of ethics from a leadership perspective provides students with needed skills to lead in various contexts.
- 2.2 Projected enrollment in the proposed course: 20 to 30 per semester.
- 2.3 Relationship of the proposed course to courses now offered by the department: There are no courses offered by the department that are similar. This course contributes to a stronger core for leadership development.
- 2.4 Relationship of the proposed course to courses offered in other departments: There are no other undergraduate courses at WKU that examine this material with the same focus and emphasis upon leadership.
- 2.5 Relationship of the proposed course to courses offered in other institutions: The course is similar to undergraduate courses such as the following examples from other institutions:
 - Penn State University: PHIL 119 Leadership Ethics
 - University of Richmond, Jepson School of Leadership: LDSP 450 Ethics and Leadership
 - University of South Florida: SLS 4274 Ethics and Power in Leadership

3. Discussion of proposed course:

- 3.1 Course objectives: Students will have the opportunity to:
 - Learn classical and influential ethical theories in the field;
 - Understand personal power schema and be able to increase personal and social power through a broader understanding of power bases;
 - Analyze past, current, and future ethical problems from a leadership perspective;

- Recognize the morally relevant features of leadership situations and the actions of leaders and followers;
- Understand the benefits of ethical behavior to themselves, their organizations, and society.

3.2 Content outline:

- Models of ethical thought;
- Classical readings;
- Models of decision-making;
- Current ethics cases and topics. Topics may include:
 - Sexual harassment, diversity, international differences;
 - Corporate governance, negotiating tactics, child labor;
 - Sustainability, marketing, information, privacy;
 - Employee safety;
 - Other topics as determined by student interest and current events.

3.3 Student expectations and requirements: Student expectations may include reading assigned journal articles and text materials, participating actively in class discussions, leading class discussion on assigned topic, completing written reviews of literature, and developing personal leadership objectives. A midterm and a final exam may assess student understanding of course content.

3.4 Tentative texts and course materials:

Beck, L.G., Murphy, J. (1994). *Ethics in educational leadership programs: An expanding role*. Corwin Press.

Ciulla, J. B. (2003). *The ethics of leadership*. Belmont, CA: Thomson Wadsworth.

Ciulla, J. B. (2004). *Ethics, the heart of leadership*. Westport, CT: Praeger.

Johnson, C.E. (2005) *Meeting the ethical challenges of leadership*. Thousand Oaks: Sage Publishing

Other readings (e.g., journal articles, book chapters) assigned as appropriate.

4. **Resources:** adequate.

4.1 Library resources: adequate.

4.2 Computer resources: adequate.

5. **Budget implications:** none.

5.1 Proposed method of staffing: As courses in the Leadership Studies program are interdisciplinary, staff may be drawn from appropriate areas.

5.2 Special equipment needed: none.

5.3 Expendable materials needed: none.

5.4 Laboratory materials needed: none.

6. **Proposed term for implementation:** Fall 2009.

7. **Dates of prior committee approvals:**

Center for Leadership Excellence October 16, 2008

University College Curriculum Committee December 1, 2008

Undergraduate Curriculum Committee 01/22/09

University Senate

Attachment: Bibliography, Library Resources Form, Course Inventory Form

Proposal Date: October 16, 2008

**University College
Leadership Studies
Proposal to Create a New Course
(Action Item)**

Contact Person: Dr. Cecile Garmon, cecile.garmon@wku.edu, 745-8973

1. Identification of proposed course:

- 1.1 Course prefix (subject area) and number: LEAD 395
- 1.2 Course title: Contemporary Leadership Issues
- 1.3 Abbreviated course title: Contemporary Leadership Issues
- 1.4 Credit hours and contact hours: 3 credit hours
- 1.5 Type of course: S—Seminar
- 1.6 Prerequisites: LEAD 200, Introduction to Leadership Studies, or instructor's permission
- 1.7 Course catalog listing: Analysis of contemporary issues from a leadership perspective.

2. Rationale:

- 2.1 Reason for developing the proposed course: LEAD 395 would become a required course in a potential Leadership concentration for the Systems Management degree and for future leadership programs. Discussions with constituents at branch campuses, especially in the Fort Knox area, indicate demand for leadership-focused undergraduate programs. In-depth knowledge of contemporary issues from a leadership perspective in various contexts and sectors provides students with needed skills to lead through dynamic times.
- 2.2 Projected enrollment in the proposed course: 20 to 30 per semester.
- 2.3 Relationship of the proposed course to courses now offered by the department: There are no courses offered by the department that are similar. This course contributes to a stronger core for leadership development.
- 2.4 Relationship of the proposed course to courses offered in other departments: There are no other undergraduate courses at WKU that examine this material with the same focus and emphasis upon leadership.
- 2.5 Relationship of the proposed course to courses offered in other institutions: The course is similar to undergraduate level courses such as the following examples from other institutions:
 - University of Maryland: PUA 202 Contemporary Issues in Leadership and Public Policy
 - University of Richmond, Jepson School of Leadership: LDSP 307 Leadership in International Contexts
 - University of Rochester: EDU 413 Contemporary Issues in Education
 - University of Exeter: CLS 3001 Contemporary Leadership Issues

3. Discussion of proposed course:

- 3.1 Course objectives. Students will:
 - Gain broad, critical knowledge of contemporary leadership issues, trends, and processes;
 - Explore the dynamics of leader/follower relations across diverse cultures in contemporary contexts;

- Critique, synthesize, and present the salient points from a set of readings on current leadership issues;
- Demonstrate the ability to make links between theory and practice around a contemporary leadership issue, through the integration of critical perspectives from the literature and reflections on relevant case studies.

3.2 Content outline:

- Varied topics viewed from a leadership perspective such as:
 - The role of nation state;
 - Economic and social aspects of globalization;
 - Cross-cultural problems and leadership theories;
 - International efforts to address deprivation;
 - Sustainment;
- How to best lead evolving social groups;
- Leadership challenges of a diverse, gendered society;
- Role of educational institutions in leadership development.

3.3 Student expectations and requirements: Student expectations may include reading assigned journal articles and text materials, participating actively in class discussions, leading class discussion on assigned topic, completing written reviews of literature, and developing their personal leadership objectives. A midterm and a final exam may assess student understanding of course content.

3.4 Tentative texts and course materials:

Wheatley, Margaret (2007). *Finding our way: Leadership for an uncertain time*. San Francisco: Berrett-Koehler Publishers.

Other readings (e.g., journal articles, book chapters) assigned as appropriate.

4. **Resources:** adequate.

4.1 Library resources: adequate.

4.2 Computer resources: adequate.

5. **Budget implications:** none.

5.1 Proposed method of staffing: As courses in the Leadership Studies program are interdisciplinary, staff may be drawn from appropriate areas.

5.2 Special equipment needed: adequate. none.

5.3 Expendable materials needed: adequate. none.

5.4 Laboratory materials needed: adequate. none.

6. **Proposed term for implementation:** January 2009

7. **Dates of prior committee approvals:**

Center for Leadership Excellence October 16, 2008

University College Curriculum Committee December 1, 2008

Undergraduate Curriculum Committee 01/22/09

University Senate

Attachment: Bibliography, Library Resources Form, Course Inventory Form

Proposal Date: 11/05/2008

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

Contact Person: Mustafa Atici, 5-5093 mustafa.atici@wku.edu

1. Identification of course:

- 1.1 Current course prefix (subject area) and number: CS 442
- 1.2 Course title: Data Structures
- 1.3 Credit hours: 3

2. Revise course title:

- 2.1 Current course title: Data Structures
- 2.2 Proposed course title: Data Structures and Algorithm Analysis
- 2.3 Proposed abbreviated title: Data Struct & Algrth Analysis
- 2.4 Rationale for revision of course title: The revised title more accurately reflects what is currently taught in the course.

3. Revise course catalog listing:

- 3.1 Current course catalog listing:
Arrays, lists, trees, storage and file structures, sorting and searching techniques, dynamic storage allocation and garbage collection algorithms, structures, pointers, bit and character strings, list processing, recursive programming for tree processing.
- 3.2 Proposed course catalog listing:
Important data structures, algorithms, and their applications, emphasizing algorithm analysis and general algorithmic strategies. Includes balanced search trees, hashing, priority queues, sorting, and graph algorithms.
- 3.3 Rationale for revision of course catalog listing:
Changes in the field of computer science caused an increased emphasis on algorithm analysis in this course. The proposed catalog listing reflects this change in course emphasis.

4. Proposed term for implementation: Fall 2009

5. Dates of prior committee approvals:

Department of Mathematics and Computer Science 11/20/08

OCSE Curriculum Committee 12/04/08

Undergraduate Curriculum Committee 01/22/09

University Senate _____

Attachment: Course Inventory Form

Proposal Date: October 24, 2008

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

Contact Person: Wanda Weidemann, wanda.weidemann@wku.edu, 745-6211

1. Identification of proposed course:

- 1.1 Course prefix (subject area) and number: MATH 205
- 1.2 Course title: Number Systems and Number Theory for Teachers
- 1.3 Abbreviated course title: Number Sys/Theory for Teachers
- 1.4 Credit hours and contact hours: 3 hours
- 1.5 Type of course: L
- 1.6 Prerequisites: Completion of general education math course with grade of C or better (For students in the early grades (K-5), middle grades (5-9) or EXED teacher certification programs only)
- 1.7 Course Catalog listing: Development of conceptual understanding of elementary place value, operations on whole numbers and integers, number theory, basic algebra, and functions

2. Rationale:

- 2.1 Reason for developing the proposed course: This is the first of three required courses for students seeking certification in elementary education or in middle grades mathematics. The proposed sequence will replace the existing Math 211 and Math 212. Past experience has shown that Math 211 and Math 212 are not sufficient to allow many prospective teachers to gain the confidence and/or competence necessary to teach mathematics well. Because of the pace of the current courses, it is not possible to spend sufficient time using technology and hands-on experiences to build the firm conceptual understanding needed by elementary and middle school teachers. Many students in these classes know procedures, but they do not know how to explain why the procedures work or how to show varied strategies to struggling students. Feedback from public schools and the repeat rate in the current courses indicate that more time is needed to develop conceptual understanding.
- 2.2 Projected enrollment in the proposed course: At least 270 students per year based on current enrollment in Math 211
- 2.3 Relationship of the proposed course to courses now offered by the department: The new three-course sequence will replace Math 211 and Math 212.
- 2.4 Relationship of the proposed course to courses offered in other departments: The Department of Curriculum and Instruction and Exceptional Education faculty must approve the substitution of these courses in the elementary education major. In addition, a new program proposal will incorporate these courses into a middle grades mathematics major.
- 2.5 Relationship of the proposed course to courses offered in other institutions: The content of these three courses will be comparable to that now offered in most elementary education programs; however, the emphasis will be on conceptual understanding rather than procedures.

3. Discussion of proposed course:

- 3.1 Course objectives: The student will be able to
- Explain the base 10 numeration system and use place to explain arithmetic operations on whole numbers
 - Utilize and explain various models for addition, subtraction, multiplication, and division of whole numbers and integers
 - Use the vocabulary of mathematics to explain mathematical topics
 - Use prime factorization to find least common multiples and greatest common factors
 - Find, extend, and generalize numerical patterns
 - Use hands-on materials to explain the process of solving simple algebraic equations
- 3.2 Content outline:
- Numeration systems with emphasis on development of Hindu-Arabic system
 - Place value
 - Conceptual development of algorithms for addition, subtraction, multiplication and division of whole numbers and integers
 - Alternative strategies for common algorithms
 - Estimation and mental arithmetic
 - Elementary number theory
 - Algebraic thinking
 - Functions
- 3.3 Student expectations and requirements:
Students will be evaluated through homework assignments, quizzes, tests, and group assignments or projects. In addition, students must complete at least one writing assignment and at least one computer assignment making them aware of available web resources.
- 3.4 Tentative texts and course materials:
Billstein, R., Libeskind, S., and Lott, J. *A Problem Solving Approach to Mathematics for Elementary School Teachers*. Boston, MA: Pearson Education, 2007 or similar text

4. Resources:

- 4.1 Library resources: Existing library resources are sufficient.
- 4.2 Computer resources: Existing resources are sufficient as students have access to the Internet.

5. Budget implications:

- 5.1 Proposed method of staffing: Existing staff will teach this course in place of Math 211.
- 5.2 Special equipment needed: none
- 5.3 Expendable materials needed: none
- 5.4 Laboratory materials needed: none

6. Proposed term for implementation: Fall 2009

7. Dates of prior committee approvals:

Department of Mathematics:	<u>October 24, 2008</u>
OCSE Curriculum Committee	<u>November 6, 2008</u>
Professional Education Council	<u>December 10, 2008</u>

Undergraduate Curriculum Committee 01/22/09

University Senate _____

Attachment: Bibliography, Library Resources Form, Course Inventory Form

Proposal Date: October 24, 2008

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

Contact Person: Wanda Weidemann, wanda.weidemann@wku.edu, 745-6211

1. Identification of proposed course:

- 1.1 Course prefix (subject area) and number: MATH 206
- 1.2 Course title: Fundamentals of Geometry for Teachers
- 1.3 Abbreviated course title: Fund Geometry for Teachers
- 1.4 Credit hours and contact hours: 3 hours
- 1.5 Type of course: L
- 1.6 Prerequisites: Completion of general education math course and Math 205 with grades of C or better (For students in the early grades (K-5), middle grades (5-9) or EXED teacher certification programs only)
- 1.7 Course catalog listing: Conceptual development of fundamental concepts of geometry and measurement

2. Rationale:

- 2.1 Reason for developing the proposed course: This is the second of three required courses for students seeking certification in elementary education or in middle grades mathematics. The proposed sequence will replace the existing Math 211 and Math 212. Past experience has shown that Math 211 and Math 212 are not sufficient to allow many prospective teachers to gain the confidence and/or competence necessary to teach mathematics well. Because of the pace of the current courses, it is not possible to spend sufficient time using technology and hands-on experiences to build the firm conceptual understanding needed by elementary and middle school teachers. Many students in these classes know procedures, but they do not know how to explain why the procedures work or how to use varied strategies for struggling students. Feedback from public schools and the repeat rate in the current courses indicate that more time is needed to develop conceptual understanding.
- 2.2 Projected enrollment in the proposed course: At least 240 students per year based on current enrollment in Math 212.
- 2.3 Relationship of the proposed course to courses now offered by the department: The new three-course sequence will replace Math 211 and Math 212.
- 2.4 Relationship of the proposed course to courses offered in other departments: The Department of Curriculum and Instruction and the EXED faculty must approve the substitution of these courses in the elementary education major. In addition, a new program proposal will incorporate these courses into a middle grades mathematics major.
- 2.5 Relationship of the proposed course to courses offered in other institutions: The content of these three courses will be comparable to that now offered in most elementary education programs; however, the emphasis will be on conceptual understanding rather than procedures.

3. Discussion of proposed course:

- 3.1 Course objectives: The student will be able to

- Compare and contrast properties of geometric figures in two and three dimensions
- Use the properties of geometric figures to solve problems
- Use congruence and similarity properties to solve problems
- Use and convert among units in the U.S. Customary and metric measurement systems
- Determine perimeter, circumference, area, surface area, and volume of geometric objects and explain why certain formulas work
- Utilize slope as a rate of change and use slopes of lines to solve problems
- Perform translations, rotations, and reflections with appropriate hands-on materials

3.2 Content outline:

- Vocabulary used in geometry
- Properties of special polygons and polyhedra
- Congruence and similarity
- Measurement (English/customary system and metric system)
- Perimeter, area, surface area, volume
- Geometry in the Cartesian plane (graphing, slope, equations of lines)
- Motion geometry (translations, reflections, rotations, dilations)
- Symmetry

3.3 Student expectations and requirements:

Students will be evaluated through homework assignments, quizzes, tests, and group assignments or projects. In addition, students must complete at least one writing assignment and at least three computer assignments using a computer geometry package.

3.4 Tentative texts and course materials:

Billstein, R., Libeskind, S., and Lott, J. *A Problem Solving Approach to Mathematics for Elementary School Teachers*. Boston, MA: Pearson Education, 2007 or similar text

4. **Resources:**

4.1 Library resources: Existing library resources are sufficient.

4.2 Computer resources: Existing resources are sufficient as students have access to the Internet.

5. **Budget implications:**

5.1 Proposed method of staffing: Existing staff will teach this course in place of Math 212.

5.2 Special equipment needed: none

5.3 Expendable materials needed: none

5.4 Laboratory materials needed: none

6. **Proposed term for implementation:** Spring 2010

7. **Dates of prior committee approvals:**

Department of Mathematics: October 24, 2008

OCSE Curriculum Committee November 6, 2008

Professional Education Council December 10, 2008

Undergraduate Curriculum Committee 01/22/09

University Senate _____

Attachment: Bibliography, Library Resources Form, Course Inventory Form

Proposal Date: 10/24/2008

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

Contact Person: Wanda Weidemann, wanda.weidemann@wku.edu, (270) 745-6211

1. Identification of proposed course:

- 1.1 Course prefix and number: MATH 304
- 1.2 Course title: Functions, Applications, and Explorations
- 1.3 Abbreviated course title: Functions Appl & Explorations
- 1.4 Credit hours and contact hours: 3.0
- 1.5 Type of course: L (lecture)
- 1.6 Prerequisites: MATH 126
- 1.7 Course catalog listing:
In-depth study of mathematical topics that are used in teaching pre-calculus and transition-to-calculus courses at the secondary school level. Modeling with linear, exponential, and trigonometric functions; curve fitting; discrete and continuous models.

2. Rationale:

- 2.1 Reason for developing the proposed course: This course is part of the replication at WKU of the UTeach curriculum for preparation of math and science teachers, and meets the contractual conditions agreed upon between WKU and the UTeach Institute.
- 2.2 Projected enrollment in the proposed course: We expect 15 students per term. All students pursuing certification as middle or high school math and/or science teachers will enroll in this course as part of the new teacher preparation curriculum. Assuming the growth experienced at the University of Texas at Austin, the enrollment could increase to over 30 per term.
- 2.3 Relationship of the proposed course to courses now offered by the department: MATH 305 (Introduction to Mathematical Modeling) has second-semester calculus (MATH 227) as a prerequisite and is at a higher level than MATH 304. Since MATH 304 will be required of teachers, the focus in this course is to apply the mathematical concepts of functions and modeling to course content at the high school level.
- 2.4 Relationship of the proposed course to courses offered in other departments: No other WKU departments offer a comparable course.
- 2.5 Relationship of the proposed course to courses offered in other institutions: This course is a replication of the *Functions and Modeling* course in the University of Texas at Austin's UTeach program.

3. Discussion of proposed course:

- 3.1 Course objectives:
Students engage in explorations and lab activities designed to lead them to
 - deepen and broaden their knowledge of topics found in secondary mathematics
 - make connections between college mathematics and secondary school mathematics
 - discover connections between different areas of mathematics
 - explore and learn appropriate use of technology in the mathematics classroom
 - engage in non-routine problem solving and problem based learning
 - learn how high school mathematics is applied in real-world situations

3.2 Content outline: Discussion of types of functions and modeling with

- Complex roots
- Conic sections
- Sequences
- Regression
- Matrices
- Parametric equations
- Polar coordinates
- Exponential/logistic models
- Vectors

3.3 Student expectations and requirements:

Homework assignments, group projects, labs, and exams

3.4 Tentative texts and course materials:

No text will be used for this course. Application will be taught using materials from UTeach in Austin.

4. Resources:

4.1 Library resources: See attached Library Resource form.

4.2 Computer resources: No additional resources are required.

5. Budget implications:

5.1 Proposed method of staffing: current staff

5.2 Special equipment needed: none

5.3 Expendable materials needed: none

5.4 Laboratory materials needed: none

6. Proposed term for implementation: Spring 2010

7. Dates of prior committee approvals:

Department of Mathematics: October 24, 2008

Ogden College Curriculum Committee: November 6, 2008

Professional Education Council: November 12, 2008

Undergraduate Curriculum Committee: 01/22/09

University Senate: _____

Attachment: Bibliography, Library Resources Form, Course Inventory Form

Proposal Date: October 24, 2008

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

Contact Person: Wanda Weidemann, wanda.weidemann@wku.edu, 745-6211

1. Identification of proposed course:

- 1.1 Course prefix (subject area) and number: MATH 308
- 1.2 Course title: Rational Numbers and Data Analysis for Teachers
- 1.3 Abbreviated course title: Rational Num/Data for Teachers
- 1.4 Credit hours and contact hours: 3 hours
- 1.5 Type of course: L
- 1.6 Prerequisites: Completion of Math 206 with grade of C or better (For students in the early grades (K-5), middle grades (5-9) or EXED teacher certification programs only)
- 1.7 Course catalog listing: Conceptual development of rational number system, including operations with and relationships among fractions, decimals, and percents; elementary probability and statistics

2. Rationale:

- 2.1 Reason for developing the proposed course: This is the last of three required courses for students seeking certification in elementary education or in middle grades mathematics. The proposed sequence will replace the existing Math 211 and Math 212. Past experience has shown that Math 211 and Math 212 are not sufficient to allow many prospective teachers to gain the confidence and/or competence necessary to teach mathematics well. Because of the pace of the current courses, it is not possible to spend sufficient time using technology and hands-on experiences to build the firm conceptual understanding needed by elementary and middle school teachers. Many students in these classes know procedures, but they do not know how to explain why the procedures work or how to show varied strategies to struggling students. Feedback from public schools and the repeat rate in the current courses indicate that more time is needed to develop conceptual understanding.
- 2.2 Projected enrollment in the proposed course: At least 240 students per year based on current enrollment in Math 212
- 2.3 Relationship of the proposed course to courses now offered by the department: The new three-course sequence will replace Math 211 and Math 212.
- 2.4 Relationship of the proposed course to courses offered in other departments: The Department of Curriculum and Instruction and EXED faculty must approve the substitution of these courses in the elementary education major. In addition, a new program proposal will incorporate these courses into a middle grades mathematics major.
- 2.5 Relationship of the proposed course to courses offered in other institutions: The content of these three courses will be comparable to that now offered in most elementary education programs; however, the emphasis will be on conceptual understanding rather than procedures.

3. Discussion of proposed course:

- 3.1 Course objectives: The student will be able to
 - Explain relationships among fractions, decimals and percents
 - Use fractions, decimals and percents to solve problems

- Explain models for arithmetic operations with ratio, proportion, fractions, decimals, and percents
- Collect data and construct various graphical representations of data
- Analyze data
- Use simple probability techniques to make predictions and solve problems

3.2 Content outline:

- Conceptual understanding of ratio, proportion, fractions, decimals, and percents
- Operations and problem solving with fractions, decimals, and percents
- Basic probability
- Measures of central tendency and dispersion
- Constructing and interpreting graphs
- Analyzing data

3.3 Student expectations and requirements:

Students will be evaluated through homework assignments, quizzes, tests, and group assignments or projects. In addition, students must complete at least one writing assignment and at least one computer assignment.

3.4 Tentative texts and course materials:

Billstein, R., Libeskind, S., and Lott, J. *A Problem Solving Approach to Mathematics for Elementary School Teachers*. Boston, MA: Pearson Education, 2007 or similar text

4. **Resources:**

4.1 Library resources: Existing library resources are sufficient.

4.2 Computer resources: Existing resources are sufficient as students have access to the Internet.

5. **Budget implications:**

5.1 Proposed method of staffing: By the fall semester of 2010, an additional faculty member will be needed to provide staffing for this course. Delivery to branch campuses will require additional staffing at those locations also.

5.2 Special equipment needed: none

5.3 Expendable materials needed: none

5.4 Laboratory materials needed: none

6. **Proposed term for implementation:** Fall 2009

7. **Dates of prior committee approvals:**

Department of Mathematics: October 24, 2008

OCSE Curriculum Committee November 6, 2008

Professional Education Council December 10, 2008

Undergraduate Curriculum Committee 01/22/09

University Senate _____

Attachment: Bibliography, Library Resources Form, Course Inventory Form

Proposal Date: 10/24/2008

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

Contact Person: Wanda Weidemann wanda.weidemann@wku.edu 745-6211

1. Identification of proposed course:

- 1.1 Course prefix (subject area) and number: MATH 490
- 1.2 Course title: Seminar in Middle Grades Mathematics
- 1.3 Abbreviated course title: Sem Middle Grades Math
- 1.4 Credit hours and contact hours: 1
- 1.5 Type of course: L (lecture)
- 1.6 Prerequisites/corequisites: Math 411 (prerequisite or corequisite)
- 1.7 Course catalog listing: Hands-on activities emphasize connections among various areas of mathematics; communicating mathematics effectively and applications of middle school mathematics. Papers and oral presentations are required.

2. Rationale:

- 2.1 Reason for developing the proposed course: Mathematics is often taught as a series of unrelated areas: algebra, geometry, probability, statistics, measurement, etc. This class will require students to explore the connections between the areas of mathematics. In addition, teachers must demonstrate that they can communicate mathematics effectively and have sufficient knowledge to address student misconceptions and address real-world applications
- 2.2 Projected enrollment in the proposed course: approximately 30 students per year based on enrollments in MATH 411
- 2.3 Relationship of the proposed course to courses now offered by the department: Math 498 (Senior Seminar) is intended specifically as a capstone course for students who have completed a major in mathematics. It is not appropriate for student in the Middle Grades Mathematics program.
- 2.4 Relationship of the proposed course to courses offered in other departments: The most closely related course is in the Department of Curriculum and Instruction. MGE 477 Mathematics Teaching in the Middle Grades is a methods course for middle school teachers. This course will focus on content while MGE 477 focuses on pedagogy.
- 2.5 Relationship of the proposed course to courses offered in other institutions: California State University at Bakersfield offers MATH 494 Senior Seminar in Elementary/Middle School Mathematics Teachers in which students “make presentations, write papers about, and discuss solutions to mathematical problems grounded in elementary and middle school mathematics with special emphasis on middle school. The focus is mathematics with appropriate inclusion of pedagogical ideas.”

3. Discussion of proposed course:

- 3.1 Course objectives: Students will participate in activities designed to
 - Deepen content knowledge necessary to teach middle school mathematics effectively
 - Make connections among various areas of mathematics
 - Integrate mathematics content and pedagogical content knowledge

- Increase confidence and/or competence of middle school teachers
- Ensure that teachers can address student misconceptions and communicate mathematics effectively

- 3.2 Content outline: Students will perform hands-on activities that emphasize
- Connections among areas of mathematics essential to teaching the middle grades: number, measurement, geometry, algebraic thinking, probability, and statistics
 - Study of mathematical topics appropriate for the middle school curriculum (e.g. numeration systems, number theory, functions, etc.) at a more rigorous level than in previous courses
 - Addressing student misconceptions in mathematics
 - Appropriate uses of technology
 - Mathematical vocabulary and communication skills
 - How students learn mathematics
- 3.3 Student expectations and requirements: homework, papers, oral presentations, lab reports on explorations
- 3.4 Tentative texts and course materials: No textbook is required. Activities will be drawn from various sources including materials published by the National Council of Teachers of Mathematics. Students will utilize graphing calculators and mathematics software packages.

4. Resources:

- 4.1 Library resources: No additional resources are required.
- 4.2 Computer resources: No additional resources are required.

5. Budget implications:

- 5.1 Proposed method of staffing: current staff
- 5.2 Special equipment needed: none
- 5.3 Expendable materials needed: none
- 5.4 Laboratory materials needed: none

6. Proposed term for implementation: Fall 2009

7. Dates of prior committee approvals:

Department of Mathematics	<u>October 24, 2008</u>
OCSE Curriculum Committee	<u>November 6, 2008</u>
Professional Education Council	<u>November 12, 2008</u>
Undergraduate Curriculum Committee	01/22/09
University Senate	_____

Attachment: Bibliography, Library Resources Form, Course Inventory Form

Proposal Date: October 30, 2008

**Ogden College of Science & Engineering
Department of Architectural & Manufacturing Sciences
Proposal to Revise A Program
(Action Item)**

Contact Person: Name: Denise Gravitt, denise.gravitt@wku.edu, 745-2176

1. Identification of program:

- 1.1 Current program reference number: 533
- 1.2 Current program title: Construction Management
- 1.3 Credit hours: 75

2. Identification of the proposed program changes:

- Add new course AMS 263: Architectural Documentation I
- Revise course number AMS 202 to AMS 163
- Revise program major hours to 74
- Allow students to choose a different advisor-approved course for the Management Elective.

3. Detailed program description:

(Program Credit Hours)		129		128	
CONSTRUCTION MANAGEMENT (OLD)		75		74	CONSTRUCTION MANAGEMENT (NEW)
Intro to Occupational Safety	AMS 140	1		1	AMS 140 Intro to Occupational Safety
Architectural Drafting	AMS 202	3		3	AMS 163 Architectural Drafting
Construction Methods & Materials	AMS 261	3		3	AMS 261 Construction Methods & Materials
				1	AMS 262 Construction Laboratory
Architectural Documentation	AMS 320	4		3	AMS 263 Arch. Documentation I
Industrial Statistics	AMS 271	3		3	AMS 271 Industrial Statistics
Survey of Building Systems	AMS 325	3		3	AMS 325 Survey of Building Systems
Internship I	AMS 398	1		1	AMS 398 Internship I
Tech Mgmt/Supervision /Team Building	AMS 430	3		3	AMS 430 Tech Mgmt/Supervision /Team Building
Senior Research	AMS 490	3		3	AMS 490 Senior Research
Surveying I	CE 160	3		3	CE 160 Surveying I
Surveying I Lab	CE 161	1		1	CE 161 Surveying I Lab
Construction Mgmt.	CE 303	3		3	CE 303 Construction Mgmt.
Construction Mgmt. Lab	CE 304	1		1	CE 304 Construction Mgmt. Lab
Equipment & Methods	CE 316	3		3	CE 316 Equipment & Methods
Applied Statics	CM 227	3		3	CM 227 Applied Statics

Contract Documents	CM 250	3	3	CM 250	Contract Documents
Applied Strength of Materials	CM 337	3	3	CM 337	Applied Strength of Materials
Applied Soil Mechanics & Foundations	CM 346	3	3	CM 346	Applied Soil Mechanics & Foundations
Construction Estimating & Bidding	CM 363	3	3	CM 363	Construction Estimating & Bidding
Construction Administration	CM 400	3	3	CM 400	Construction Administration
Construction Law	CM 426	3	3	CM 426	Construction Law
Applied Structural Design	CM 447	3	3	CM 447	Applied Structural Design
Construction Scheduling	CM 462	3	3	CM 462	Construction Scheduling
Intro. Accounting Financial	ACCT 200	3	3	ACCT 200	Intro. Accounting Financial
Intro. Accounting Managerial	ACCT 201	3	3	ACCT 201	Intro. Accounting Managerial
MGT 305, 308, 312, 361; AMS 390	MGT Elective	3	3	MGT Selective	MGT 305, MGT 308, MGT 361; AMS 390 (or other advisor-approved course)
Human Resources Management	MGT 311	3	3	MGT 311	Human Resources Management
GENERAL EDUCATION		46	46	GENERAL EDUCATION	
Category A			Category A		
	ENG 100	3	3	ENG 100	
	ENG 300	3	3	ENG 300	
	For. Lang.	3	3	For. Lang.	
COMM 161(145)	COMM	3	3	COMM	COMM 161(145)
Category B			Category B		
	ENG 200	3	3	ENG 200	
	AMS 180	3	3	AMS 180	
	PHIL 321	3	3	PHIL 321	
Category C			Category C		
	HIST 119 /120	3	3	HIST 119 /120	
	ECON 150	3	3	ECON 150	
	Cat. C Elective	3	3	Cat. C Elective	
Category D			Category D		
	CHEM 116	3	3	CHEM 116	
	CHEM106	1	1	CHEM106	
	PHYS 201	4	4	PHYS 201	
	MATH 122	3	3	MATH 122	
Category E			Category E		
	Cat. E Elective	3	3	Cat. E Elective	
Category F			Category F		

	SFTY 171	1	1	SFTY 171	
	Cat. F Elective	1	1	Cat. F Elective	
OTHER REQUIREMENTS		8	8	OTHER REQUIREMENTS	
University Experience/ AMS	AMS 175	2	2	AMS 175	University Experience/ AMS
Program Elective		3	3		Program Elective
Science Elective		3	3		Science Elective

4. Rationale for the proposed program change:

The Architectural Sciences Program has made several revisions that affect the Construction Management Program. One revision was changing the number for AMS 202 to AMS 163. Another revision was to delete course AMS 320 (4 credit hours) which we replaced with the new course AMS 263 (3 credit hours). This also resulted in a reduction of program hours from 75 to 74, and overall degree hours from 129 to 128.

For flexibility we would like to allow students the possibility choosing a different advisor-approved course in the Management Elective category.

5. Effect catalog year: Fall 2009

6. Dates of prior committee approvals:

Architectural & Manufacturing Sciences Dept 10/31/2008

OCSE Curriculum Committee 12/4/2008

Undergraduate Curriculum Committee 01/22/09

University Senate _____

Attachments: Program Inventory Form & #3.

Proposal Date: October 23, 2008

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

Contact Person: Nancy A. Rice, nancy.rice@wku.edu, 5-5995

1. Identification of program:

- 1.1 Current program reference number: 525
- 1.2 Current program title: Major in Biology
- 1.3 Credit hours: 48

2. Identification of the proposed program changes: We propose to Change the supporting course requirements to include the option of:

- A) MATH 142 (Calculus with Applications for Life Science),
- B) GEOG 316 (Fundamentals of Geographic Information Systems), and
- C) SOCL 302 (Strategies of Social Research).

3. Detailed program description:

<u>Current Biology 525</u>	<u>Proposed Biology 525</u>
BIOL 120-121	BIOL 120-121
BIOL 122-123	BIOL 122-123
<u>One from each of the following groups:</u>	<u>One from each of the following groups:</u>
A. BIOL 222-223, BIOL 224-225, BIOL 226-227	A. BIOL 222-223, BIOL 224-225, BIOL 226-227
B. BIOL 319-322, BIOL 327	B. BIOL 319-322, BIOL 327
C. BIOL 315, BIOL 430	C. BIOL 315, BIOL 430
Additional 300 and 400-level courses to complete the 48 hour requirement.	Additional 300 and 400-level courses to complete the 48 hour requirement.
<u>Required Supporting Courses</u>	<u>Required Supporting Courses</u>
1. MATH 118, or MATH 116 and MATH 117, or higher	1. MATH 118, or MATH 116 and MATH 117, or higher
2. PHYS 231 -232 or PHYS 250-251	2. PHYS 231 -232 or PHYS 255-256
3. CHEM 120-121	3. CHEM 120-121
4. Two courses from the following list: BIOL 282, CHEM 222-223, CHEM 314, CHEM 340-341, CHEM 330, CIS 343, CIS 226 or CS 226 or CS 230, GEOG 317, GEOG 328, GEOG 416, GEOG 417, MATH 126, MATH 227, MATH 305, MATH 307, PHYS 332-233, or PHYS 255-256	4. Two courses from the following list: BIOL 282, CHEM 222-223, CHEM 314, CHEM 340-341, CHEM 330, CIS 343, CIS 226 or CS 226 or CS 230, GEOG 316 , GEOG 317, GEOG 328, GEOG 416, GEOG 417, MATH 126, MATH 142 , MATH 227, MATH 305, MATH 307, PHYS 332-233, or PHYS 265-266, SOCL 302

Students may count a maximum of 6 credit hours of BIOL 369,389, or 399 toward this major.

Students may count a maximum of 6 credit hours of BIOL 369,389, or 399 toward this major.

4. Rationale for the proposed program change:

Several new courses have been identified that have been deemed as important supporting course work for a population of our Biology majors. The addition of these courses to our program is justified as follows:

- MATH 142 is an appropriate calculus course for biology majors in that it stresses the applications of calculus in life science
- PHYS 255-256 and PHYS 265-266 are the equivalent of the University Physics I/II courses that served as our calculus-based physics supporting courses in the past; only the course numbering has changed as a result of changes initiated by the Department of Physics and Astronomy last year.
- GEOG 316 was deemed an appropriate level of GIS training for our students at the undergraduate level
- SOCL 302 provides a second supporting course to our BIOL 283 (Biostatistics). For our students who are interested in survey methodology (reporting of illnesses, self-reported reactions to pharmaceuticals, community surveys for sustainability or land use projects, etc.) it fills a gap that we don't currently cover in our statistics courses.

5. Proposed term for implementation: Fall 2009

6. Dates of prior committee approvals:

Biology Department/Division:	October 8, 2008
OCSE Curriculum Committee	November 6, 2008
Professional Education Committee	November 12, 2008
Undergraduate Curriculum Committee	01/22/09
University Senate	_____

Attachment: Program Inventory Form

Proposal Date: October 23, 2008

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

Contact Person: Nancy A. Rice, nancy.rice@wku.edu, 5-5995

1. Identification of program:

- 1.1 Current program reference number: 617
- 1.2 Current program title: Major in Biology (with minor)
- 1.3 Credit hours: 36

2 Identification of the proposed program changes:

We propose to Change the supporting course requirements to include the option of:

- 2.1 MATH 142 (Calculus with Applications for Life Science),
- 2.2 GEOG 316 (Fundamentals of Geographic Information Systems), and
- 2.3 SOCL 302 (Strategies of Social Research).

3 Detailed program description:

<u>Current Biology 617</u>	<u>Proposed Biology 617</u>
BIOL 120-121	BIOL 120-121
BIOL 122-123	BIOL 122-123
<u>One from each of the following groups:</u>	<u>One from each of the following groups:</u>
A. BIOL 222-223, BIOL 224-225, BIOL 226-227	A. BIOL 222-223, BIOL 224-225, BIOL 226-227
B. BIOL 319-322, BIOL 327	B. BIOL 319-322, BIOL 327
C. BIOL 315, BIOL 430	C. BIOL 315, BIOL 430
Additional 300 and 400-level courses to complete the 48 hour requirement.	Additional 300 and 400-level courses to complete the 48 hour requirement.
<u>Required Supporting Courses</u>	<u>Required Supporting Courses</u>
1. MATH 118, or MATH 116 and MATH 117, or higher	1. MATH 118, or MATH 116 and MATH 117, or higher
2. PHYS 231 -232 or PHYS 250-251	2. PHYS 231 -232 or PHYS 255-256
3. CHEM 120-121	3. CHEM 120-121
4. Two courses from the following list: BIOL 282, CHEM 222-223, CHEM 314, CHEM 340-341, CHEM 330, CIS 343, CIS 226 or CS 226 or CS 230, GEOG 317, GEOG 328, GEOG 416, GEOG 417, MATH 126, MATH 227, MATH 305, MATH 307, PHYS 332-233, or PHYS 255-256	4. Two courses from the following list: BIOL 282, CHEM 222-223, CHEM 314, CHEM 340-341, CHEM 330, CIS 343, CIS 226 or CS 226 or CS 230, GEOG 316 , GEOG 317, GEOG 328, GEOG 416, GEOG 417, MATH 126, MATH 142 , MATH 227, MATH 305, MATH 307, PHYS 332-233, or PHYS 265-266, SOCL 302

Students may count a maximum of 3 credit hours of BIOL 369,389, or 399 toward this major.

Students may count a maximum of 3 credit hours of BIOL 369,389, or 399 toward this major.

4. Rationale for the proposed program change:

Several new courses have been identified that have been deemed as important supporting course work for a population of our Biology majors. The addition of these courses to our program is justified as follows:

- MATH 142 is an appropriate calculus course for biology majors in that it stresses the applications of calculus in life science
- PHYS 255-256 and PHYS 265-266 are the equivalent of the University Physics I/II courses that served as our calculus-based physics supporting courses in the past; only the course numbering has changed as a result of changes initiated by the Department of Physics and Astronomy last year.
- GEOG 316 was deemed an appropriate level of GIS training for our students at the undergraduate level
- SOCL 302 provides a second supporting course to our BIOL 283 (Biostatistics). For our students who are interested in survey methodology (reporting of illnesses, self-reported reactions to pharmaceuticals, community surveys for sustainability or land use projects, etc.) it fills a gap that we don't currently cover in our statistics courses.

5. Proposed term for implementation: Fall 2009

6. Dates of prior committee approvals:

Biology Department/Division:	October 8, 2008
OCSE Curriculum Committee	November 6, 2008
Professional Education Committee	November 12, 2008
Undergraduate Curriculum Committee	01/22/09
University Senate	_____

Attachment: Program Inventory

Proposal Date: 10/24/2008

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

Contact Person: Wanda Weidemann, wanda.weidemann@wku.edu, 745-6211

1. Identification of program:

- 1.1 Current program reference number: 728
- 1.2 Current program title: Mathematics
- 1.3 Credit hours: 35

2. Identification of the proposed program changes:

Note that changes apply *only* to Option 2: Major Certifiable for Teaching Secondary Mathematics.

- Add the provision that students in this option must have a second major in Science and Mathematics Education (SMED)
- Require MATH 304 Functions, Applications, and Explorations and remove one elective
- Add a requirement that the student must attain a grade of “C” or better in each required mathematics course and a 2.5 GPA for all required mathematics courses

2. Detailed program description:

Existing program:	Proposed Program:
MATH 126: Calculus and Analytic Geometry I (4.5 hr.) MATH 227: Calculus and Analytic Geometry II (4.5 hr.) MATH 307: Linear Algebra (3 hr.) MATH 310: Discrete Mathematics (3 hr.) MATH 317: Introduction to Algebraic Systems (3 hr.) MATH 323: Geometry I (3 hr.) MATH 327: Multivariable Calculus (4 hr.) MATH 498: Senior Seminar (1 hr.) STAT 301: Introductory Probability and Applied Statistics (3 hrs.)	MATH 126: Calculus and Analytic Geometry I (4.5 hr.) MATH 227: Calculus and Analytic Geometry II (4.5 hr.) MATH 307: Linear Algebra (3 hr.) MATH 310: Discrete Mathematics (3 hr.) MATH 317: Introduction to Algebraic Systems (3 hr.) MATH 323: Geometry I (3 hr.) MATH 327: Multivariable Calculus (4 hr.) MATH 498: Senior Seminar (1 hr.) STAT 301: Introductory Probability and Applied Statistics (3 hrs.) MATH 304: Functions, Applications, and Explorations (3 hrs.)
6 elective hours from the list below, at least 3 hours of which must be 400-level mathematics other than MATH 475:	3 elective hours from the list below:
MATH 275: Introductory Topics in Mathematics (up to 3 hours) MATH 305: Introduction to Mathematical Modeling (3 hrs.) MATH 315: Theory of Numbers (3 hrs.)	MATH 405: Numerical Analysis I (3 hrs.) MATH 406: Numerical Analysis II (3 hrs.) MATH 409: History of Mathematics (3 hrs.) MATH 415: Algebra and Number Theory (3 hrs.) MATH 417: Algebraic Systems (3 hrs.)

MATH 329: Probability and Statistics I (3 hrs.) MATH 331: Differential Equations (3 hrs.) MATH 398: Seminar (up to 3 hours) MATH 405: Numerical Analysis I (3 hrs.) MATH 406: Numerical Analysis II (3 hrs.) MATH 409: History of Mathematics (3 hrs.) MATH 415: Algebra and Number Theory (3 hrs.) MATH 417: Algebraic Systems (3 hrs.)	MATH 421: Problem solving for Secondary Teachers (3 hrs.) MATH 423: Geometry II (3hrs.) MATH 429: Probability and Statistics II (3 hrs.) MATH 431: Intermediate Analysis I (3 hrs.) MATH 432: Intermediate Analysis II (3 hrs.) MATH 435: Partial Differential Equations (3 hrs.) ▪ Students in this option must have a second major in Science and Mathematics Education (SMED) ▪ Student must attain a grade of “C” or better in each required mathematics course and a 2.5 GPA for all required mathematics courses
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4. Rationale for the proposed program change:

Acceptance of the UTeach grant from the Exxon/Mobil Foundation through the National Science and Mathematics Initiative requires that WKU replicate the UTeach program at the University of Texas, Austin as closely as possible. To accommodate requirements of UTeach, mathematics students seeking certification will have a second major in the newly proposed Science and Mathematics Education (SMED) program. In addition, the functions and modeling course (MATH 304) is to be required of all middle school and secondary mathematics majors. The Department of Mathematics and Computer Science agreed that MATH 304 would be a good course for majors planning to teach secondary mathematics.

The requirement of “C” or better in all required mathematics courses is an attempt by the WKU mathematics faculty to improve the quality of mathematics teachers. The 2.5 GPA for the major courses has always been required for entrance to student teaching. It is include it here for emphasis.

5. Proposed term for implementation and special provisions (if applicable): Fall 2009

6. Dates of prior committee approvals:

Department of Mathematics:	<u>October 24, 2008</u>
OCSE Curriculum Committee	<u>November 6, 2008</u>
Professional Education Council	<u>December 10, 2008</u>
Undergraduate Curriculum Committee	01/22/09
University Senate	_____

Attachment: Program Inventory Form

Proposal Date: 10/24/2008

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

Contact Person: Wanda Weidemann, wanda.weidemann@wku.edu, 745-6211

1. Identification of program:

- 1.1 Program title: Middle Grades Mathematics
- 1.2 Degree: Bachelor of Science
- 1.3 Classification of Instructional Program Code (CIP):
- 1.4 Required hours in proposed major program: 32.5 to 34
- 1.5 Special information: Intended for students seeking certification to teach mathematics in grades 5-9; second major in Science and Mathematics Education (SMED) is required.
- 1.6 Program admission requirements: Substitutions for MATH 117, 126, 227, 203, 205, 206 will be accepted as part of the Two-Plus-Two plan from the Kentucky community and Technical College System (KCTCS)
- 1.7 Catalog description:

A major in middle grades mathematics is for students who plan to teach mathematics in grades 5-9 only. The degree requires a second major in Science and Mathematics Education (SMED). Upon successful completion of both majors, the student will receive a Bachelor of Science degree.

The student must complete a minimum of 32.5 hours in mathematics by taking the following required courses:

- MATH 117 Trigonometry (3 hours) and MATH 126 Calculus and Analytic Geometry I (4.5 hours)
- or
- MATH 126 and MATH 227 Calculus and Analytic Geometry I and II (4.5 hours each)
- MATH 205 Number Systems and Number Theory for Elementary Teachers (3 hours)
- MATH 206 Fundamentals of Geometry for Elementary Teachers (3 hours)
- MATH 308 Rational Numbers and Data Analysis for Elementary Teachers (3 hours)
- MATH 203 Statistics (3 hours) or STAT 301 Introduction to Applied Statistics (3 hours)
- MATH 304 Functions, Applications, and Explorations (3 hours)
- MATH 403 Geometry for Elementary/Middle School Teachers (3 hours) or MATH 323 Geometry I (3 hours)
- MATH 411 Problem Solving for Elementary/Middle School Teachers (3 hours) or MATH 421 Problem Solving for Secondary Teachers (3 hours)
- MATH 413 Algebra and Technology (3 hours)
- MATH 490 Seminar in Middle School Mathematics (1 hour)

Students must attain a grade of "C" or better in each required course and must have a 2.5 GPA overall in required mathematics courses.

2. Rationale:

2.1 **Reason for developing the proposed major program:**

Results of the Trends in Mathematics and Science Study (TIMSS) show that eighth grade students in the United States lag behind student in other developed countries in mathematics and science. The Department of Mathematics at WKU is aware of this problem and sees improved content preparation of middle school teachers as being part of the solution.

WKU has received a grant from Exxon/Mobile Foundation through the Mathematics Science Initiative to improve preparation of middle school and secondary mathematics and science teachers. The grant requires replication of a very successful program at the University of Texas, Austin. In order to replicate the program, future middle grades mathematics teachers must have more mathematics courses. The middle school mathematics major will not only strengthen the mathematical knowledge of future teachers, but will include classes designed to help them fully understand the content they will teach.

2.2 **Projected enrollment in the proposed major program:** When the program is fully implemented at all branch campuses, we expect to have at least 20-30 new students per year based on enrollment in the current Middle Grades Education program with emphasis in mathematics

2.3 **Relationship of the proposed major program to other programs now offered by the department:** The Department of Mathematics has no program for middle grades education. The department already teaches the mathematics courses required under the current major in Middle Grades Education with mathematics as an area of emphasis.

2.4 **Relationship of the proposed major program to other university programs:** The program will replace the existing Middle Grades Education major with a mathematics emphasis. In the past, students were allowed to choose mathematics and one other area of emphasis. Now if they wish to choose mathematics, they become Middle Grades Mathematics majors and will not have another area of emphasis. Thus, the number of mathematics hours is increased.

2.5 **Relationship of the proposed major program to similar programs offered elsewhere in Kentucky and in other states (including programs at benchmark institutions):** This program is a replication of the UTeach program at the University of Texas, Austin. The University of Kentucky, University of Louisville, Murray State University, Northern Kentucky University, Eastern Kentucky University, and Morehead State University all have Middle Grades Education majors housed in the College of Education with mathematics as a possible area of emphasis. This is the system WKU is currently using. Kentucky State University does not certify middle school teachers. WKU will be the first institution in the state to adopt this innovative program.

2.6 **Relationship of the proposed major program to the university mission and objectives:** This program will prepare students to be productive citizens and lifelong learners. The improvement of P-12 education will promote a higher quality of life in the region. The university promotes the improvement of education at all levels, especially in elementary and secondary schools.

3. **Objectives of the proposed major program:** The objectives of the program are to
- Prepare middle grades mathematics teachers who are both competent and confident in teaching mathematics
 - Provide hands-on experience that will lead teachers to understand mathematics conceptually so they can teach more than procedures
 - Prepare teachers to utilize mathematics software packages and technology.

4. **Program description:**

4.1 **Curriculum:** (New courses are marked with an asterisk.)

Required Courses: (minimum of 32.5 hours)

- MATH 117 Trigonometry (3 hours) and MATH 126 Calculus and Analytic Geometry I (4.5 hours)
- or
- MATH 126 and MATH 227 Calculus and Analytic Geometry I and II (4.5 hours each)
- MATH 205* Number Systems and Number Theory for Elementary Teachers (3 hours)
- MATH 206* Fundamentals of Geometry for Elementary Teachers (3 hours)
- MATH 308* Rational Numbers and Data Analysis for Elementary Teachers (3 hours)
- MATH 203 Statistics or STAT 301 Introduction to Applied Statistics (3 hours)
- MATH 304* Functions, Applications, and Explorations (3 hours)
- MATH 403 Geometry for Elementary/Middle School Teachers or
- MATH 323 Geometry I (3 hours)
- MATH 411 Problem Solving for Elementary/Middle School Teachers or MATH 421 Problem Solving for Secondary Teachers (3 hours)
- MATH 413 Algebra and Technology (3 hours)
- MATH 490* Seminar in Middle School Mathematics (1 hour)

Students must attain a grade of “C” or better in each required course and must have a 2.5 overall average in the required mathematics courses.

4.2 **Accreditation, certification, approval, and/or licensure:** The program will be submitted to the Kentucky Education Professional Standards Board for approval. This approval will allow WKU to certify successful candidates to teach mathematics in grades 5-9 provided that candidates meet all other requirements for certification.

4.3 **Program delivery:** Courses will be offered by a combination of face-to-face and interactive television, with the potential for online courses in the future.

5. **Resources:**

- 5.1 Faculty: Existing faculty will teach courses on campus; an additional full-time or part-time faculty member will be needed at each branch campus to ensure successful delivery of the program.
- 5.2 Technological and electronic informational resources (e.g., databases, e-journals) No additional technology is needed.
- 5.3 Facilities and equipment: Existing facilities and equipment are sufficient.

6. **Proposed term for implementation:** Fall 2009

7. **Dates of prior committee approvals:**

Department of Mathematics: October 24, 2008

OCSE Curriculum Committee November 6, 2008

Contact with Designee of the Office of Academic Affairs (Dennis George),
re: CPE Posting December 5, 2008

Professional Education Council

December 10, 2008

Undergraduate Curriculum Committee

01/22/09

University Senate

Attachment: Program Inventory Form