

Graduate Studies and Research  
Western Kentucky University  
Office of the Dean  
745-2446

**REPORT TO THE UNIVERSITY SENATE**

DATE: September 2006 (April, June and July items)  
FROM: Graduate Studies

The Graduate Council submits the following items for consideration. Items marked with an asterisks [\*] are information items. All other items are consent items:

**I. One time Only**

WOMN 501– Women & Kids Learning Together Summer Camp\*

**II. Revise a Course**

EXED 523 – Curriculum/Methods in Early Childhood Special Education

**III. Create a Course**

GEOG 532 – Seminar in Synoptic Meteorology

IECE 523 – Planning Curriculum and Instruction in Interdisciplinary Early Childhood Education

IECE 525 – Special Topics in Interdisciplinary Early Childhood Education

SWRK 575 – Adolescent Issues in Kentucky Child Welfare

ADED 597 – Directed Study in Adult Education

MATH 542 – Advanced Topics in Discrete Mathematics

MATH 511 – Secondary Mathematics from an Advanced Perspective I

MATH 512 – Secondary Mathematics from an Advanced Perspective II

MATH 514 – Applications and Modeling for Secondary Teachers

**IV. Revise a Program**

149- Master of Science in Nursing

144 – MAE Interdisciplinary Early Childhood Education

156 – Planned Sixth Year/Rank I in Interdisciplinary Early

Rank 1 Guidance Program Secondary\*

Rank 1 Guidance Program Elementary\*

147 – Psychology

085 – Mathematics

**V. Create a Program**

Adult Education

M.A. – Mathematics

**VI. Revise Catalog Course Listing**

MATH 501 – Introduction to Probability and Statistics I

Proposal Date: 2/18/2006

College of Health and Human Services  
Department of Nursing  
Proposal to Revise a Program  
(Consent)

Contact Person: Beverly Siegrist      email: [beverly.siegrist@wku.edu](mailto:beverly.siegrist@wku.edu)      Phone: 53490

**1. Identification of program**

- 1.1 Reference Number: 149
- 1.2 Current Program Title: Master of Science in Nursing
- 1.3 Credit hours: 45-48

**2. Identification of the proposed changes:**

- 2.1 Change admission policies
- 2.2 Change policy related to MSN courses allowed prior to official admission to the MSN program

**3. Detailed program description:**

3.1 Current Admission Requirements	Proposed Admission Requirements
1. Complete Graduate Studies application and fee	1. Complete Graduate Studies application and fee
2. GRE/GAP score of 2200	2. GRE/GAP score of 2200
3. GRE writing score of 3.5	3. GRE writing score of 3.5
4. Three professional references	4. Three professional references
5. BSN degree from an accredited program	5. BSN degree from an accredited program
6. Official transcripts of all undergraduate and graduate courses	6. Official transcripts of all undergraduate and graduate courses
7. Successful applicant-graduate interview	7. Successful applicant-graduate interview
	<b>8. Completion of a 3-credit hour statistics course approved by the MSN graduate faculty</b>

3.2 Current Policy related to MSN Course which may be taken prior to official admission.

Undergraduate students in the last semester of a BSN program or MSN applicants with an earned BSN degree may take up to 9 credit hours of selected courses during one semester prior to acceptance into the MSN program. These courses may only be taken during one semester prior to admission. The student must complete all application requirements during this semester including completion of:

- Graduate Studies application
- Submission of professional references
- Submission of all official transcripts of undergraduate and graduate course work
- Completion of GRE

Applicants for the MSN program may select courses from the following identified by specialty concentrations:

**Current**

Primary Care Nurse Practitioner:  
Nurs 500 Advanced Pathophysiology  
Nurs 515 Advanced Pharmacology  
Graduate Statistics

**Proposed**

Primary Care Nurse Practitioner:  
Nurs 500 Advanced Pathophysiology  
Graduate Statistics

Nurse Educator:  
Nurs 500 Advanced Pathophysiology  
Nurs 515 Advanced Pharmacology  
Graduate Statistics  
CNS 552 Test and Assessment  
PSY 511 Psychology of Learning

Nurse Educator:  
Nurs 500 Advanced Pathophysiology  
Graduate Statistics  
CNS 552 Test and Assessment  
PSY 511 Psychology of Learning

**4. Rationale for proposed program revisions:**

- 4.1 Change in Admission Policy: A graduate statistics course is currently required during the first semester of the MSN program as a prerequisite to Nurs 510 Nursing Research. This change will decrease the number of credit hours required during the first semester of the program from 15 to 12 credit hours making the semester more manageable for the graduate student.
- 4.2 Policy Change related to taking nursing courses prior to official admission. Previously students were allowed to take Nurs 515 Advanced Pharmacology during one semester prior to admission. The content in the course provides the most current information related to medications and pharmacologic treatment necessary for student success in clinical nursing courses. Taking Nurs 515 Advanced Pharmacology, concurrently with the first clinical course will enhance application and use of pharmacology content. This course will no longer be available to students not officially accepted into the MSN program.

## 5. Proposed term for implementation and special provisions:

**Term:** Fall, 2006

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

MSN Program/Nursing Department Division	<u>02/03/2006</u>
CHHS Graduate Curriculum Committee	<u>3/30/2006</u>
Graduate Council	<u>4/13/2006</u>
University Senate	<u></u>

Proposal Date: 12/14/2005

**College of Education and Behavioral Sciences  
Department of Special Instructional Programs  
Proposal to Create a New Course  
(Action Item)**

Contact Person: Vicki D. Stayton, Ph.D. e-mail: vicki.stayton@wku.edu Phone: 5-3450

**IDENTIFICATION OF PROPOSED COURSE**

Prefix and number: IECE 523

Title: Planning Curriculum and Instruction in Interdisciplinary Early Childhood Education

Abbreviated title: Planning Curr Instr IECE

Credit hours and contact hours: 3

Type of course: C (Lecture/Lab)

Prerequisites: IECE 521, IECE 522

Catalog course listing:

Planning, designing, and selecting curricula, including learning environments and instruction, for children birth through kindergarten, both with and without disabilities, and their families. Field experience is required; students are responsible for their own transportation. A course fee will be assessed.

**RATIONALE**

**2.1 REASON FOR DEVELOPING THE PROPOSED COURSE:**

THIS COURSE IS DESIGNED FOR INTERDISCIPLINARY EARLY CHILDHOOD EDUCATION (IECE) GRADUATE STUDENTS. WESTERN KENTUCKY UNIVERSITY'S IECE CURRICULUM IS BASED ON KENTUCKY'S IECE NEW TEACHER STANDARDS, THE NATIONAL ASSOCIATION FOR THE EDUCATION OF YOUNG CHILDREN'S STANDARDS FOR PROGRAMS, THE COUNCIL FOR EXCEPTIONAL CHILDREN'S (CEC) COMMON CORE, AND THE DIVISION FOR EARLY CHILDHOOD OF THE CEC'S PERSONNEL STANDARDS. BASED ON THESE STANDARDS, WESTERN'S IECE CURRICULUM MUST PREPARE STUDENTS TO DESIGN DEVELOPMENTALLY APPROPRIATE CURRICULUM AND EXPERIENCES FOR CHILDREN BIRTH THROUGH FIVE YEARS, BOTH WITH AND WITHOUT DISABILITIES, AND THEIR FAMILIES. THIS COURSE WILL FOCUS ON STANDARDS SPECIFIC TO PLANNING AND CURRICULUM.

IECE 523 will replace ELED 509 in the curriculum. ELED 509 focuses on advanced methods and materials for primary age children instead of children birth through kindergarten and their families. Previously, a

section of ELED 509 was offered annually for IECE majors only and addressed the personnel standards proposed to be included in IECE 523.

The IECE specific section of ELED 509 is no longer being offered.

Projected enrollment in the proposed course:

15 students per offering based on current and projected enrollment

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

The graduate programs in Exceptional Education, Library Media Education, and Literacy require courses that address curriculum and instruction in those fields (e.g., EXED 531 Advanced Prescriptive Teaching and LTCY 519 Foundations of Reading Instruction). The content in those courses is discipline specific and focuses on students in P-12.

Because the IECE graduate programs lead to initial certification in the field some topics in IECE 523 are the same as those addressed by IECE 322 Planning Curriculum and Instruction for Diverse Learners. However, IECE 322 provides for an initial knowledge/awareness of the content, while IECE 523 focuses on application and synthesis of the content. In addition, some content is addressed in more depth in IECE 322 (e.g., philosophical and theoretical orientations to early childhood curriculum), while that content is presented as a review in IECE 523.

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

Graduate programs in Curriculum and Instruction require courses that address curriculum and instruction in those fields (e.g., SEC 520 Planning for Instruction and SEC 521 Implementing an Instructional Plan). The content in those courses is discipline specific and focuses on students in grades P-12.

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

Eastern Kentucky University (EKU), Murray State University (MSU), the University of Kentucky (UK), and the University of Louisville (U of L) have approved graduate programs in IECE. Each of these universities has a course or courses that address some or all of the standards included in this proposed course. Those courses are: EKU - SED 436 Early Childhood Intervention and Programming and ELED 419 Teaching in Kindergarten, MSU - SED 653 Methods and Materials for Infants, Toddlers, and Preschoolers, UK - EDS 620 Instructional Programming and Assessment in Early Childhood Special Education, and U of L - Curriculum Approaches of Early Childhood Education and Curriculum and Methods in Early Childhood Special Education.

## **DISCUSSION OF PROPOSED COURSE**

Course objectives:

- Identify the philosophical/theoretical orientations to early childhood education (ECE) and early childhood special education (ECSE).
- Assess and analyze early childhood environments based on recommended practices.
- Adapt lesson plans to meet the needs of diverse learners.
- Develop an IEP based on case study information.
- Develop task analyses for IEP objectives and IFSP outcomes.
- Embed IEP objectives and IFSP outcomes into daily routines.
- Review and evaluate published curricula.

Content outline:

- A. Philosophical bases for ECE and ECSE
- B. Developmentally appropriate practices
- C. Learning environments in home and center-based settings
  - 1. Brain research as it relates to learning environments
  - 2. Design and organization of space and time
  - 3. Role of adults
  - 4. Assessment of early childhood environments
- D. Planning child and family services
  - 1. Development of IEPs and IFSPs
  - 2. Adaptation of lesson plans for diverse learners
  - 3. Development of task analyses
  - 4. Inclusion of IEP objectives and IFSP outcomes into daily routines
- E. Curriculum
  - 1. Definition and components
  - 2. Assessment linked with curriculum
  - 3. Criteria for the development, selection and evaluation of curricula

Student expectations and requirements:

- Assess an infant/toddler learning environment and develop a written report of the assessment (field experience assignment).
- Assess a preschool learning environment and develop a written report of the assessment (field experience assignment).
- Review and evaluate a published infant/toddler curriculum.
- Review and evaluate a published preschool curriculum.
- Quizzes.

Tentative texts and course materials:

Bredekkamp, S., & Copple, C. (1997). *Developmentally appropriate practices in early childhood programs* (Rev. Ed.). Washington, DC: National Association for the Education of Young Children.

Grisham-Brown, J., Hemmeter, M.L., & Pretti-Frontczak, K. (2005). *Blended practices for teaching young children in inclusive settings*. Baltimore, MD: Paul H. Brookes.

Kostelnik, M.J., Soderman, A.K., & Whiren, A.P. (2004). *Developmentally appropriate curriculum: Best practices in early childhood education*. Columbus, OH: Merrill.

Sandall, S., Hemmeter, M.L., Smith, B.J., & McLean, M.E. (2005). *DEC recommended practices: A comprehensive guide for practical application in early intervention/early childhood special education*. Longmont, CO: Sopris West.

## **RESOURCES**

### Library resources:

The library has indicated that current resources are insufficient to support this course. Publications in the submitted bibliography will be high priority for requisition by the WKU libraries. However, the majority of publications in the bibliography are available for student and faculty check-out in the Early Childhood Resource Center, TPH 104. This resource center houses approximately 1565 titles that include print materials, videos, curriculum kits, assessment kits, and professional journals.

### Computer resources:

The College of Education and Behavioral Sciences has adequate computer resources for faculty and student support.

## **BUDGET IMPLICATIONS**

### Proposed method of staffing:

Graduate faculty in Interdisciplinary Early Childhood Education

### Special equipment needed:

None

### Expendable materials needed:

None

### Laboratory supplies needed:

Curriculum kits

## **PROPOSED TERM FOR IMPLEMENTATION: FALL, 2007**

**Dates of prior committee approvals:**

Department of Special Instructional Programs	12-14-05
CEBS College Curriculum Committee	3-7-06
Professional Education Council	4-12-06
Graduate Council	4-13-06
University Senate	

**Attachments: Bibliography, Library Resources Form, [Course Inventory Form](#)**

Proposal Date: 12/14/2005

**College of Education and Behavioral Sciences  
Department of Special Instructional Programs  
Proposal to Create a New Course  
(Action Item)**

Contact Person: Vicki D. Stayton, Ph.D. e-mail: vicki.stayton@wku.edu Phone: 5-3450

**IDENTIFICATION OF PROPOSED COURSE**

Prefix and number: IECE 525

Title: Special Topics in Interdisciplinary Early Childhood Education

Abbreviated title: Special Topics IECE

Credit hours and contact hours: 1-3, may be repeated for up to 6 hours

Type of course: S (Seminar)

Prerequisites: IECE 520, IECE 521, and IECE 522; or instructor permission

Catalog course listing:

In-depth reading, investigation, and discussion of current research, issues, and/or trends in Interdisciplinary Early Childhood Education (IECE).

**RATIONALE**

**2.2 REASON FOR DEVELOPING THE PROPOSED COURSE:**

THIS COURSE IS DESIGNED FOR INTERDISCIPLINARY EARLY CHILDHOOD EDUCATION (IECE) GRADUATE STUDENTS AND OTHER INTERESTED STUDENTS. WESTERN KENTUCKY UNIVERSITY'S GRADUATE CURRICULUM IS BASED ON THE STANDARDS OF THE KENTUCKY EDUCATION PROFESSIONAL STANDARDS BOARD, THE NATIONAL ASSOCIATION FOR THE EDUCATION OF YOUNG CHILDREN, THE COUNCIL FOR EXCEPTIONAL CHILDREN (CEC), AND THE DIVISION FOR EARLY CHILDHOOD OF THE CEC. EACH OF THOSE ORGANIZATIONS IN THEIR ADVANCED PROGRAM STANDARDS ADDRESS ONGOING PROFESSIONAL DEVELOPMENT BASED ON IDENTIFIED INTERESTS AND NEEDS OF GRADUATE STUDENTS. THIS COURSE WILL ALLOW FOR THAT ONGOING PROFESSIONAL DEVELOPMENT AND INDIVIDUALIZATION. A SPECIAL TOPICS COURSE HAS BEEN NEEDED IN THE PAST FOR TWO PRIMARY REASONS. FIRST, IECE GRADUATE STUDENTS WHO HAVE ELECTIVES IN THEIR PROGRAM OF STUDY DUE TO ALREADY HAVING ACHIEVED THE STANDARDS OF ONE OR MORE REQUIRED COURSES HAVE SOMETIMES WANTED TO FOCUS ON A SPECIFIC TOPIC OR TOPICS IN THE FIELD IN AN INDEPENDENT MANNER. IN THOSE SITUATIONS, AN INDEPENDENT STUDY COURSE FROM ANOTHER DISCIPLINE HAS BEEN USED WITH THE CONTENT TAILORED FOR THE IECE MAJOR. SECOND, EXTERNAL FUNDING HAS BEEN AVAILABLE IN THE PAST FOR PROFESSIONAL INSTITUTES/ACADEMIES FOR WHICH UNIVERSITY CREDIT COULD BE OBTAINED. IN BOTH CASES, A SPECIAL TOPICS COURSE WAS APPROVED ON A ONE-TIME ONLY BASIS. TOPICS FOR THOSE INSTITUTES/ACADEMIES HAVE FOCUSED ON LEADERSHIP,

LITERACY, MATHEMATICS. OTHER POSSIBLE TOPICS ARE TECHNOLOGY WITH YOUNG CHILDREN, FAMILIES AND CHILDREN FROM CULTURALLY AND LINGUISTICALLY DIVERSE BACKGROUNDS, ASSISTIVE TECHNOLOGY, ETC.

Projected enrollment in the proposed course:

15 students per offering based on previous enrollment in the institutes/academies and projected enrollment

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

The graduate programs in Exceptional Education, Library Media Education, and Literacy require similar courses. The content in those courses is discipline specific and focuses on students in P-12. These courses are: EXED 518 Seminar: Contemporary Challenges in Special Education, LME 519 Special Topics in Library Media Education, LME 512 Issues in Library Media Education, and LTCY 624 Seminar in Literacy Issues.

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

Other departments in the College of Education and Behavioral Sciences, as well as departments in other colleges at Western offer special topics and/or independent study courses (e.g., CNS 669 Special Topics in Counseling and Guidance, ELED 545 Investigations in Classroom Teaching, NURS 590 Special Topics in Nursing, BA 592 Special Topics in Business). Those courses, however, do not address IECE specific topics/content.

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

Eastern Kentucky University (EKU), Murray State University (MSU), the University of Kentucky (UK), and the University of Louisville (U of L) have approved graduate programs in IECE. MSU, UK and U of L have special topics courses. Those courses are: MSU - SED 660 Problems in Special Education (elective); UK - Readings in Family Development and Relations, Current Trends in Early Childhood Education and Care, and EDS 621 Issues in the Early Childhood Education of the Handicapped; and U of L - EDEM 604 Special Problems in Curriculum Development.

## **DISCUSSION OF PROPOSED COURSE**

Course objectives:

Specific objectives to be determined based on the research, issue, or trend identified.

General objective statements are as follows:

- Review research about a specified topic in IECE.
- Identify issues specific to an identified topic in IECE.
- Identify trends specified to an identified topic in IECE.

**Content outline:**

To be determined based on the research, issue, or trend identified.

**Student expectations and requirements:**

To be determined based on the research, issue, or trend to be investigated.

Possible expectations and requirements include:

- Review and written summary of research on a specific topic.
- In-class presentation on a specified research topic.
- In-class presentation on a specified issue in IECE.
- In-class presentation on a specified trend in IECE.
- Interview with IECE professionals regarding a specific issue or trend in IECE, with a written summary of the interview.

**Tentative texts and course materials:**

To be determined based on the research, issue or trend.

## **RESOURCES**

**Library resources:**

The Educational Resources Center and the CEBS' Dean's Office have determined that a library form is not needed for this new course proposal.

**Computer resources:**

The College of Education and Behavioral Sciences has adequate computer resources for faculty and student support.

## **BUDGET IMPLICATIONS**

**Proposed method of staffing:**

Graduate faculty in Interdisciplinary Early Childhood Education

**Special equipment needed:**

None

**Expendable materials needed:**

None

**Laboratory supplies needed:**

None

## **PROPOSED TERM FOR IMPLEMENTATION: SPRING 2007**

**Dates of prior committee approvals:**

Department of Special Instructional Programs

12-14-05

CEBS College Curriculum Committee	<u>3-7-06</u>
Professional Education Council	<u>4-12-06</u>
Graduate Council	<u>4-13-06</u>
University Senate	

**Attachments: Bibliography, Library Resources Form, [Course Inventory Form](#)**

Proposal Date: 12/14/2005

**College Of Education And Behavioral Sciences  
Department of Special Instructional Programs  
Proposal to Revise Course Prerequisites  
(Consent Item)**

Contact Person: Vicki D. Stayton, Ph.D. e-mail: vicki.stayton@wku.edu Phone: 5-3450

**1. Identification of course**

- 1.1 Course prefix (subject area) and number: EXED 523
- 1.2 Course title: Curriculum/Methods in Early Childhood Special Education
- 1.3 Credit hours: 3

**2. Current prerequisites/corequisites/special requirements:**

Pre-reqs : IECE 521, IECE 522, ELED 509

**3. Proposed prerequisites/corequisites/special requirements:**

Prerequisites : IECE 521, IECE 522, IECE 523

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

ELED 509 is being proposed for deletion from the Interdisciplinary Early Childhood Education (IECE) graduate curricula. IECE 523 will replace that course in the curricula. IECE graduate courses are only offered one semester per year and include content that is prerequisite to following courses. In order for students to remain in sequence and matriculate through the program in a timely manner, they must complete IECE 521, IECE 522, and IECE 523 before enrollment in this course.

**5. Effect on completion of major/minor sequence:** These changes will facilitate timely completion of the major sequence. Students matriculating through the program who have already completed an IECE majors only section of ELED 509 will not be required to take IECE 523 as a prerequisite for EXED 523.

**6. Proposed term for implementation:** Fall, 2007

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

Department of Special Instructional Programs:	<u>12-14-05</u>
CEBS Curriculum Committee	<u>3-7-06</u>
Professional Education Council	<u>4-12-06</u>
University Curriculum Committee	<u>4-13-06</u>

University Senate

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**Attachment: Course Inventory Form**

Proposal Date: 12/14/2005

**College of Education and Behavioral Sciences  
Department of Special Instructional Programs  
Proposal to Revise a Program  
(Action Item)**

Contact Person: Vicki D. Stayton, Ph.D. e-mail: vicki.stayton@wku.edu Phone: 5-3450

**IDENTIFICATION OF PROGRAM**

Reference Number: 144

Current Program Title: Master of Arts in Education Interdisciplinary Early Childhood Education

Credit hours: 36

**IDENTIFICATION OF THE PROPOSED CHANGES:**

- Substitute IECE 523, Planning Curriculum and Instruction in Interdisciplinary Early Childhood Education, for ELED 509, Advanced Methods and Materials in Early Childhood Education

**DETAILED PROGRAM DESCRIPTION:**

Master of Arts in Education  
Interdisciplinary Early Childhood Education

(See attached table.)

**RATIONALE FOR PROPOSED PROGRAM REVISIONS:**

The Interdisciplinary Early Childhood Education (IECE), Master of Arts in Education (MAE) program provides for the initial preparation in IECE and is designed for students who do not have a bachelor's degree in IECE. Western Kentucky University's IECE, MAE curriculum is based on Kentucky's IECE New Teacher Standards, the National Association for the Education of Young Children's Standards for Programs, the Council for Exceptional Children's (CEC) Common Core, and the Division for Early Childhood of the CEC's Personnel Standards. Based on these standards, Western's IECE curriculum must prepare students to design developmentally appropriate curriculum and experiences for children birth through five years, both with and without disabilities, and their families. IECE 523 will focus on standards specific to planning and curriculum for children birth through kindergarten age.

- IECE 523 will replace ELED 509 in the curriculum. ELED 509 focuses on advanced methods and materials for primary age children instead of children birth through kindergarten and their families. Previously, a section of ELED 509 was offered annually for IECE majors only and addressed the personnel

standards proposed to be included in IECE 523. The IECE specific section of ELED 509 is no longer being offered.

**PROPOSED TERM FOR IMPLEMENTATION AND SPECIAL PROVISIONS:**

**Term:** Fall, 2007

**Provisions, if applicable:** The revised program requirements will be in effect for all students filing Form C beginning August 1, 2007, and thereafter.

**DATES OF PRIOR COMMITTEE APPROVALS:**

Department of Special Instructional Programs:	<u>12-14-05</u>
CEBS Curriculum Committee	<u>3-7-06</u>
Professional Education Council	<u>4-12-06</u>
Graduate Council	<u>4-13-06</u>
University Senate	_____

**Attachment:** [Program Inventory Form](#)

Current Program Requirements	Proposed Program Requirements
<p><b>PROFESSIONAL EDUCATION – 21 HOURS</b></p> <p><b>ELED 509 Advanced Methods and Materials for Early Childhood Education (3 hours)</b></p> <p>IECE 521 Assessment in IECE (3 hours) IECE 522 Family-Centered Services 3 hours) IECE 524 Internship in IECE (3 hours)</p> <p>EXED 523 Curriculum/Methods in Early Childhood Special Education (3 hours) CD 481G Speech &amp; Language Development (3 hours) CD 486G Language Disorders (3 hours)</p>	<p><b>PROFESSIONAL EDUCATION – 21 HOURS</b></p> <p>IECE 523 Planning Curriculum and Instruction in Interdisciplinary Early Childhood Education (IECE) ( 3 hours)</p> <p>IECE 521 Assessment in IECE IECE 522 Family-Centered Services (3 hours)</p> <p><b>IECE 524 Internship in IECE (3 hours)</b></p> <p>EXED 523 Curriculum/Methods in Early Childhood Special Education (3 hours) CD 481G Speech &amp; Language Development (3 hours) CD 486G Language Disorders (3 hours)</p>
<p><b>CONTENT AREA COURSES – 12 HOURS</b></p> <p>CFS 577 Seminar in Child Development Research (3 hours)</p> <p>IECE 520 Organizing Programs for IECE (3 hours)</p> <p>SWK 436G Services to Children (3 hours)</p> <p>PSY 645 Consultation in Educational &amp; Mental Health Settings: Theory &amp; Practice (3 hours)</p>	<p><b>CONTENT AREA COURSES – 12 HOURS</b></p> <p>CFS 577 Seminar in Child Development Research (3 hours)</p> <p>IECE 520 Organizing Programs for IECE (3 hours)</p> <p>SWK 436G Services to Children (3 hours)</p> <p>PSY 645 Consultation in Educational &amp; Mental Health Settings: Theory &amp; Practice (3 hours)</p>
<p><b>RESEARCH FOUNDATIONS – 3 HOURS</b></p> <p>EDFN 500 Research Methods (3 hours)</p>	<p><b>RESEARCH FOUNDATIONS – 3 HOURS</b></p> <p><b><i>EDFN 500 RESEARCH METHODS (3 HOURS)</i></b></p>
<p><b>PREREQUISITES- 3 HOURS</b></p> <p>EXED 330 or EXED 516 (3 hours)</p>	<p><b>PREREQUISITES- 3 HOURS</b></p> <p>EXED 330 or EXED 516 (3 hours)</p>

Proposal Date: 12/14/2005

**College of Education and Behavioral Sciences  
Department of Special Instructional Programs  
Proposal to Revise a Program  
(Action Item)**

Contact Person: Vicki D. Stayton, Ph.D. e-mail: vicki.stayton@wku.edu Phone: 5-3450

**IDENTIFICATION OF PROGRAM**

Reference Number: 156

Current Program Title: Planned Sixth Year/Rank I in Interdisciplinary Early Childhood Education

Credit hours: 33

**IDENTIFICATION OF THE PROPOSED CHANGES:**

- Substitute IECE 523, Planning Curriculum and Instruction in Interdisciplinary Early Childhood Education, for ELED 509, Advanced Methods and Materials in Early Childhood Education

**DETAILED PROGRAM DESCRIPTION:**

Planned Sixth Year/Rank I in  
Interdisciplinary Early Childhood Education

(See attached table.)

**RATIONALE FOR PROPOSED PROGRAM REVISIONS:**

The Interdisciplinary Early Childhood Education (IECE), Planned Sixth Year/Rank I program provides for the initial preparation in IECE and is designed for students who do not have a bachelor's degree in IECE. Western Kentucky University's IECE, Planned Sixth Year/Rank I curriculum is based on Kentucky's IECE New Teacher Standards, the National Association for the Education of Young Children's Standards for Programs, the Council for Exceptional Children's (CEC) Common Core, and the Division for Early Childhood of the CEC's Personnel Standards. Based on these standards, Western's IECE curriculum must prepare students to design developmentally appropriate curriculum and experiences for children birth through five years, both with and without disabilities, and their families. IECE 523 will focus on standards specific to planning and curriculum for children birth through kindergarten age.

- IECE 523 will replace ELED 509 in the curriculum. ELED 509 focuses on advanced methods and materials for primary age children instead of children birth through kindergarten and their families. Previously, a section of ELED 509 was offered annually for IECE majors only and addressed the personnel

standards proposed to be included in IECE 523. The IECE specific section of ELED 509 is no longer being offered.

**PROPOSED TERM FOR IMPLEMENTATION AND SPECIAL PROVISIONS:**

**Term:** Fall, 2007

**Provisions, if applicable:** The revised program requirements will be in effect for all students filing Form B beginning August 1, 2007, and thereafter.

**DATES OF PRIOR COMMITTEE APPROVALS:**

Department of Special Instructional Programs:	<u>12-14-05</u>
CEBS Curriculum Committee	<u>3-7-06</u>
Professional Education Council	<u>4-12-06</u>
Graduate Council	<u>4-13-06</u>
University Senate	_____

**Attachment:** [Program Inventory Form](#)

Current Program Requirements	Proposed Program Requirements
<p><b>PROFESSIONAL EDUCATION – 21 HOURS</b></p> <p><b>ELED 509 Advanced Methods and Materials for Early Childhood Education (3 hours)</b></p>	<p><b>PROFESSIONAL EDUCATION – 21 HOURS</b></p> <p>IECE 523 Planning Curriculum and Instruction in Interdisciplinary Early Childhood Education (IECE) ( 3 hours)</p>
<p>IECE 521 Assessment in IECE (3 hours)</p> <p>IECE 522 Family-Centered Services 3 hours)</p> <p>IECE 524 Internship in IECE (3 hours)</p> <p>EXED 523 Curriculum/Methods in Early Childhood Special Education (3 hours)</p> <p>CD 481G Speech &amp; Language Development (3 hours)</p> <p>CD 486G Language Disorders (3 hours)</p>	<p>IECE 521 Assessment in IECE IECE 522 Family-Centered Services (3 hours)</p> <p><b>IECE 524 Internship in IECE (3 hours)</b></p> <p>EXED 523 Curriculum/Methods in Early Childhood Special Education (3 hours)</p> <p>CD 481G Speech &amp; Language Development (3 hours)</p> <p>CD 486G Language Disorders (3 hours)</p>
<p><b>CONTENT AREA COURSES – 12 HOURS</b></p> <p>CFS 577 Seminar in Child Development Research (3 hours)</p> <p>IECE 520 Organizing Programs for IECE (3 hours)</p> <p>SWK 436G Services to Children (3 hours)</p> <p>PSY 645 Consultation in Educational &amp; Mental Health Settings: Theory &amp; Practice (3 hours)</p>	<p><b>CONTENT AREA COURSES – 12 HOURS</b></p> <p>CFS 577 Seminar in Child Development Research (3 hours)</p> <p>IECE 520 Organizing Programs for IECE (3 hours)</p> <p>SWK 436G Services to Children (3 hours)</p> <p>PSY 645 Consultation in Educational &amp; Mental Health Settings: Theory &amp; Practice (3 hours)</p>
<p><b>PREREQUISITES- 3 HOURS</b></p> <p>EXED 330 or EXED 516 (3 hours)</p>	<p><b>PREREQUISITES- 3 HOURS</b></p> <p>EXED 330 or EXED 516 (3 hours)</p>

**College of Health and Human Services  
Department of Social Work  
Proposal to Create a New Course  
Action**

Contact Person: Melanie Randolph [melanie.randolph@wku.edu](mailto:melanie.randolph@wku.edu) 745 -2088

**1. Identification of proposed course**

- 1.1 Prefix and number: SWRK 575
- 1.2 Title: Adolescent Issues in Kentucky Child Welfare
- 1.3 Abbreviated Title: Adol issues in Ky child welfare
- 1.4 Credit hours and contact hours: 3 credit hours/45 contact hours
- 1.5 Type of course: L-Lecture
- 1.6 Prerequisites, co requisites and/or special requirements:  
Prerequisite: None required  
Co-requisite: None required  
Special requirements: Baccalaureate degree earned from an accredited university **and** an employee of the Cabinet for Health and Family Services.
- 1.7 Catalog course listing:  
Focuses on special issues related to adolescents and status offenders involved with the Kentucky Child Welfare system. Emphasis is on related policy issues and developing skill sets for working with adolescents within the Kentucky Child Welfare system. Issues related to both urban and rural areas will be explored.

**2. Rationale**

- 2.1 Reason for developing the proposed course:  
Course is part of the elective courses for the CFL (Credit for Learning) project. The project is a collaborative project with the University of Kentucky and the University of Louisville to offer specialized graduate education to degreed child welfare workers. Through a needs assessment, knowledge, skills and theory covered in the course were identified as needed for social workers working with adolescents within the Kentucky Child Welfare System by the Cabinet for Health and Family Services and the State-wide CFL curriculum committee.
- 2.2 Projected enrollment in the proposed course:  
Based on previous enrollment in SWRK 571 & 572 within the collaborative Universities (U of L, UK, and WKU) we project 100 students annually. The course will be strongly recommended for all Child Welfare workers who work with adolescents. The Cabinet for Health and Family Services' child welfare workers will be enrolling in this course over the next two years.
- 2.3 Relationship of the proposed course to courses now offered by the department:  
This course is part of the CFL course offerings. The department currently offers four CFL courses consistently, (SWRK 571, 572, 573 & 574) and occasionally offers additional CFL courses as seminars or electives.
- 2.4 Relationship of the proposed course to courses offered in other departments:

This course is part of the CFL program within the Department of Social Work. Theory and knowledge from education, psychology, sociology, and political science will be utilized within the course. However, the course is unique in its emphasis of examining adolescent issues within the Kentucky Child Welfare system. There are no other courses that teach these social work skills specific to this population in this environment.

2.5 Relationship of the proposed course to courses offered in other institutions: Two other state universities (UK & U of L) offer CFL courses within their curriculum; however, this course will be exclusive to WKU and is tailored to meet the unique concerns of Kentucky Child Welfare workers who are engaged with adolescent clients and their families.

### **3. Discussion of proposed course**

3.1 Course objectives:

Upon completion of the course students will

- Identify special issues related to working with adolescents within the Kentucky Child Welfare system.
- Demonstrate skills necessary for working with this population within this environment.
- Identify social work policy and legal implications associated with adolescents involved with the Kentucky Child Welfare system.

3.2 Content outline:

#### **COURSE OUTLINE: ASSESSING and UNDERSTANDING ADOLESCENT ISSUES**

- I. Historical and Contemporary Context of Adolescence
  - a. Adolescence Across Life Span comparison
  - b. Stages of Adolescent Development
  - c. Youth in Kentucky Child Welfare System
  - d. Impact of Child Maltreatment on Stages of Development
- II. Theories of Adolescent Development
  - a. Systems Theories of Development
  - b. Psychological Development
  - c. Social Development
  - d. Moral Development
  - e. Biological Development
  - f. Impact of Child Maltreatment on Stages of Development
- III. Assessment Techniques with Adolescents and their Families (CQA)
  - a. Communication techniques
  - b. Specialized assessment with Kentucky Child Welfare
  - c. Rapid Assessment tools (Walmyr Tools)
- IV. Role of the Social Worker and DJJ
  - a. Community Partners
  - b. Type of Offenses
  - c. Social Work Role and the Courts
  - d. Statistics
  - e. Implications on the judicial process on family dynamics
- V. Social Work Intervention

- a. Seven Issues in Adolescent Intervention
- b. Develop Objectives and task for adolescent intervention
- c. Placement Option planning

VI. Case Closure and Termination

- a. Closing an adolescent case
- b. Working with Late Adolescents
- c. Effective Aftercare Plans

3.3 Student expectations and requirements:  
Students will be expected to read all required course materials and to attend face to face class sessions as well as engaging in Blackboard on-line activities.  
Student assignments include examinations, literature review and assessments (individual and family CQA).

3.4 Tentative texts and course materials:  
Morris, L. and Freundlich, M. (2004). *Youth involvement in the child welfare and juvenile justice systems: A case of double jeopardy?* Washington DC: CWLA Press.

Rew, L. (2005). *Adolescent health: A multidisciplinary approach to theory, research and intervention.* Thousand Oaks, CA: Sage.

Bibliography (see attachment)

**4. Resources**

4.1 Library Resources:  
Adequate (see library form)

4.2 Computer Resources:  
The computer software for web-enhanced courses at the University is sufficient.  
In addition, computer access will be provided by the Cabinet for Health and Families for their employees enrolled in this course.

**5. Budget Implications**

5.1 Proposed method of staffing:  
MSW/CFL existing faculty

5.2 Special equipment needed:  
None

5.3 Expendable materials needed:  
None

5.4 Laboratory supplies needed:  
None

**6. Proposed term for implementation:**

Fall 2006

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

Department of Social Work 2/24/06

College of Health and Human Services 3/24/06

Graduate Council 6/8/06

University Senate

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**Attachments:**

**Bibliography, Library Resources Form, Course Inventory Form**

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National Academy of Sciences (2003). *Working Families and Growing Kids: Caring for Children and Adolescents*. From: <http://www.nap.edu/openbook/0309087031/html/178.html>

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Rashid, Sonja. (2004). [Evaluating a Transitional Living Program for Homeless, Former Foster Care Youth.](#) *Research on Social Work Practice*, Vol. 14 Issue 4, 240-248.

Reid, Jennifer S. & Ross, Jean W. (2005). [First voice: The Circle of Courage and Independent Living.](#) *Reclaiming Children & Youth*, Vol. 14 Issue 3, 164-16

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

Contact Person: Greg Goodrich e-mail: gregory.goodrich@wku.edu Phone: 5-5986

**IDENTIFICATION OF PROPOSED COURSE**

Prefix and number: GEOG 532

Title: Seminar in Synoptic Meteorology

Abbreviated title: Seminar in Synoptic Meteorology

Credit hours and contact hours: 3 hrs

Type of course: L (Lecture)

Prerequisites: Graduate student standing, GEOG 432, or permission of instructor

Catalog course listing:

Seminar addresses the analysis and prediction of large-scale weather systems, such as extratropical cyclones and their associated fronts and jet streams, with an emphasis on a supervised research project.

**RATIONALE**

**2.3 REASON FOR DEVELOPING THE PROPOSED COURSE:**

THIS SEMINAR WILL SERVE TWO PURPOSES. FOR GRADUATE STUDENTS NEW TO THE GEOSCIENCES, IT WILL PROVIDE A FOUNDATION FOR THE STUDY OF LARGE-SCALE ATMOSPHERIC MOTIONS THAT LEAD TO THE DEVELOPMENT OF MID-LATITUDE CYCLONES AT A GRADUATE LEVEL. FOR THE GRADUATE STUDENT WHO HAS ALREADY TAKEN GEOG 432 (SYNOPTIC METEOROLOGY), IT WILL ALLOW THEM TO FURTHER THEIR KNOWLEDGE OF THE SUBJECT THROUGH A SUPERVISED RESEARCH PROJECT. THIS COURSE SERVES AS A BRIDGE BETWEEN THE THEORY OF DYNAMIC METEOROLOGY AND THE APPLIED NATURE OF WEATHER ANALYSIS AND FORECASTING.

Projected enrollment in the proposed course:

3-5 students based on previous enrollment in other graduate level meteorology courses.

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

Seminar in Synoptic Meteorology will provide a more in-depth study of large-scale atmospheric motions and mid-latitude cyclones than GEOG 432 (Synoptic Meteorology). GEOG 532 will require a supervised research project, and students will demonstrate strong knowledge of the current scientific literature in synoptic meteorology.

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

There are no courses offered at Western that are similar to or related to Synoptic Meteorology. This course may be appropriate for graduate students in the Agriculture and Biology Departments.

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

Many Universities offering an M.S. in Geoscience provide seminar courses that build on topics addressed in upper-division undergraduate courses. Mississippi State University, University of Northern Colorado, and Indiana University are examples of similar departments that offer a seminar in Synoptic Meteorology. All courses offer an in-depth examination of large-scale atmospheric motions and require a supervised research project.

## **DISCUSSION OF PROPOSED COURSE**

Course objectives:

The seminar in Synoptic Meteorology will offer an in-depth examination of large-scale atmospheric motions and mid-latitude cyclones with an emphasis on a supervised research project and a demonstrated knowledge of the current scientific literature in synoptic meteorology.

Content outline:

Section One: Tools for Meteorological Analysis

- Surface Analyses
- Upper Air Analyses
- Soundings and Stability

Section Two: Mid-latitude Weather Systems.

- Fronts and Frontal Dynamics
- Middle Latitude Cyclone Structure and Dynamics
- Thermal Wind and Jets
- Isentropic Analyses and Conveyer Belts
- Isentropic Potential Vorticity

Section Three: Regional Weather Systems

- Severe Thunderstorms
- Flooding Events
- Cold Air Damming and Ice Storms
- Tropical Systems and Hurricanes
- Lee Cyclogenesis and Colorado Lows
- Explosive Cyclogenesis and Nor'easters

Section Four: Supervised Research Project

- Student will develop a research project based on an area of interest

Student expectations and requirements:

Exams based on textbook readings and lecture material. Periodic assignments that apply discussion material in lecture to case studies. Daily map discussions of synoptic conditions over central United States.

Independent research project and class presentation.

Tentative texts and course materials:

- Djuric, D., 1994: Weather analysis. Prentice Hall, 304 pp.
- Stull, R. B., 1999: Meteorology for Scientists and Engineers. Brooks-Cole, 490 pp.
- Vasquez, T., 2002: Weather Forecasting Handbook. Weather Graphics Technologies, 204 pp.
- Coursepack materials relating to case studies
- Peer-reviewed journal articles concerning new developments in Synoptic Meteorology

## **RESOURCES**

Library resources:

See attached library resource form and bibliography.

Computer resources:

No new additional resources required.

## **BUDGET IMPLICATIONS**

Proposed method of staffing:

Existing faculty will teach this course.

Special equipment needed:

None.

Expendable materials needed:

None.

Laboratory supplies needed:

None.

## **PROPOSED TERM FOR IMPLEMENTATION: FALL, 2006**

### **Dates of prior committee approvals:**

Geography & Geology Department	12/8/2005
OCSE College Curriculum Committee	3/2/2006
University Curriculum Committee	
University Senate	

**Attachments: Bibliography, Library Resources Form, [Course Inventory Form](#)**

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

Contact Person: Jim Berger, Ph.D. [jim.berger@wku.edu](mailto:jim.berger@wku.edu) or (270)745-3892

**1. Identification of proposed course**

- 1.1 Prefix and number: ADED 597
- 1.2 Title: Directed Study in Adult Education
- 1.3 Abbreviated title: Directed Study Adult Ed.
- 1.4 Credit hours and contact hours: 3
- 1.5 Type of course: Independent study
- 1.6 Prerequisites, corequisites and/or special requirements:  
Restricted to students admitted to MAE – Adult Education; completion of at least 21 hours in the program, including all other core requirements.  
Permission of faculty supervisor required.
- 1.7 Catalog course listing:  
Directed study related to best practices in adult education. Requires completion of research or applied project on approved topic.

**2. Rationale**

- 2.1 Reason for developing the proposed course:  
The proposed course has been developed to meet the need for a capstone experience for the MAE - Adult Education program. The proposed course has been developed to serve as an integrating experience and as an occasion for students to employ knowledge gained in previous courses to do research on an applied project related to their professional interests. Students taking this course would be students pursuing a degree in Adult Education using the non-thesis option. In lieu of the thesis, students would be required to take a practicum course

and the proposed ADED 597: Directed Study in Adult Education. Students, in consultation with their advisor, would develop an applied research based project that would be tailored to their needs and career aspirations. By taking this proposed course, it is anticipated that students would undergo a culminating experience that would prepare them for working in the field.

Development of the proposed course is consistent with the institution's statement of purpose as found in the graduate catalog: to provide students with "rigorous academic programs in the liberal arts and sciences and traditional and emerging professional programs, with emphasis at the baccalaureate level, complemented by relevant associate and graduate-level programs."

**2.2 Projected enrollment in the proposed course:**

The course will be required of all students pursuing the non-thesis option of the M.A.E. in Adult Education, which currently has 12 to 15 active students. It is expected that 3 to 5 students would take it each semester.

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

The proposed course complements existing Adult Education courses in that it provides a capstone course to integrate experiences and knowledge gained in earlier courses. The proposed course would be taken as one of the last two courses in the Adult Education sequence. This course, paired with EDU 590: Adult Education Practicum, will constitute the non-thesis, six hour option for students pursuing a degree in Adult Education.

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

A number of other programs offer directed study or readings courses for graduate students. For example, the Department of Educational Administration,

Leadership, and Research offers EDAD 596 – Readings in Education; the Department of Psychology offers PSY 590 – Readings or Research in Psychology; the Department of Mathematics offers MATH 500 – Readings in Mathematics; the Department of English offers ENG 598 – Advanced Directed Study; the Department of History offers HIST 590 - Advanced Individual Study; the Department of Music offers MUS 513 - Directed Individual Study; the Department of Philosophy and Religion offers PHIL 501 - Readings in Philosophy; and the Department of Political Science offers PS 580 - Directed Study, the Department of Curriculum and Instruction offers EDU 595 - Directed Study in Education and Behavioral Sciences. The proposed course is intended specifically for students interested in adult education. The course will provide a means to facilitate students' efforts to integrate the knowledge and skills developed in prior courses and bring that knowledge and those skills to bear in researching a topic related to each student's specific professional interests.

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

No other institution in Kentucky offers the Master of Arts in Adult Education, so it follows that no similar courses to the proposed course exist at other Kentucky institutions. However, the graduate program in Adult and Higher Education at Morehead State University contains two courses that are similar in nature. The first, EDAH 670: Directed Research (1 to 3 hours) “Supervised research investigation of a professional problem. Student must submit proposal describing the nature and procedure of research prior to starting. Format for proposal will be supplied by the instructor upon request. Copy of final report on the project required for department's permanent file of completed projects.” The second course, EDAH 676: Directed Study (1 to 3 hours) contains the following catalog description: “Guided study of a professional problem. Student must submit plan describing nature of study prior to starting. Format for plan will be supplied by the instructor upon request. Copy of final report on the study required for department's permanent file of completed projects.” Both of these courses provide a capstone

experience whereby students must complete a project based on existing literature and an exploration of a current problem in the field.

### **3. Discussion of proposed course**

#### **3.1 Course objectives:**

The course is designed to help students to:

- design a culminating project utilizing knowledge and skills developed in previous courses in the adult education program,
- demonstrate skills in researching an approved topic consistent with their professional goals, and
- demonstrate their ability to integrate and apply course work as they complete their respective culminating projects.

#### **3.2 Content outline:**

As the proposed course is a directed study, the specific content will vary.

However, each student will be required to develop and research a project related to his or her professional goals.

#### **3.3 Student expectations and requirements:**

Each student will be expected to complete readings on an instructor-approved topic related to his or her professional goals and then complete a culminating research or applied project. Other assignments or papers may be required.

#### **3.4 Tentative texts and course materials:**

Readings will vary for each student, depending on the topic selected for study.

### **4. Resources**

#### **4.1 Library resources:**

Library resource requirements will vary.

4.2 Computer resources:

No special computer resource needs, beyond what is already available, have been identified.

**5. Budget implications**

5.1 Proposed method of staffing:

Existing faculty in the college will staff the course. Load credit will be consistent with faculty load policy related to supervision of special readings, research, and independent/directed study courses.

5.2 Special equipment needed: none

5.3 Expendable materials needed: none

5.4 Laboratory supplies needed: none

**6. Proposed term for implementation:** Fall, 2006

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

Department of Special Instructional Programs	March 3, 2006
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CEBS Graduate Programs Committee	May 2, 2006
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Graduate Council	June 8, 2006
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University Senate	_____
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**Attachment: Course Inventory Form**

**College of Education and Behavior Sciences  
Department of Special Instructional Programs  
Proposal to Create a New Major Program  
(Action Item)**

Contact Person: **Jim Berger** [jim.berger@wku.edu](mailto:jim.berger@wku.edu) (270)745-3892

**1. Identification of proposed major program**

1.1 Title: Adult Education

1.2 Degree: Master of Arts in Education

1.3 Classification of Instructional Program (CIP) Code: 13.1201

1.4 Required hours in the proposed major program: 30

1.5 Special information:

1.6 Program admission requirements:

Admission to the Master of Arts in Education in Adult Education program requires a GAP score (undergraduate GPA X GRE score) of 2500 and a minimum GRE analytical writing score of 3.5.

1.7 **Catalog description:** The Master of Arts in Education in Adult Education prepares students for professional adult education practice at the graduate level to teach adults in a variety of settings. These settings include community education, adult basic education, adult literacy, corporate training, human resources and organizational development, workplace training, patient education, technical and community colleges, and other adult learning centers.

The 30-hour Master of Arts in Education in Adult Education will consist of a required core of 15 semester hours in Adult Education a research foundations course, and two 3-hour electives. The student and his or her advisor will choose electives relevant to the student's area of interest. The remaining six hours will be attained through completion of a thesis or two additional courses. Students completing the additional non-thesis courses will be required to make a presentation of their findings of their applied research project. All students taking the non-thesis option will be required to take a comprehensive exam. All students are encouraged to take EDFN 500 – Research Methods with the first twelve hours of their program.

**Core Courses (15 hours)**

<u>Course</u>	<u>Name</u>	<u>Credit</u>
<u>Hours</u>		
ADED 510	Introduction to Adult Education	3.0
ADED 520	Methods for Teaching Adults	3.0
ADED 530	Program Planning for Adults	3.0
ADED 540	History and Philosophy of Adult Education	3.0
ADED 611	Adult Learning and Development	3.0

**Electives (6 hours)** Courses may be selected from the following or from other courses with prior approval of advisor.

ADED 598	Adult Education Seminar	3.0
CNS 555	Social and Cultural Diversity in Counseling	3.0
CNS 556	Developmental Career Counseling	3.0
CNS 557	Human and Family Development in Counseling	3.0
CNS 572	American College Student	3.0
CNS 574	Student Development in Higher Education	3.0
CNS 577	Counseling Concepts and Applications for Student Affairs Professionals	3.0
CNS 580	Family Life Studies	3.0
CNS 586	Parenting Issues	3.0
CNS 667	Drug Abuse Counseling	3.0
CNS 670	Parameters of Law in Student Affairs and Higher Education	3.0
EXED 516	Exceptional Child: Perspectives and Issues	3.0
EXED 518	Seminar: Contemporary Challenges in Spec. Ed.	3.0
EXED 534	Seminar: Research in Exceptional Child Education	3.0
LTCY 519	Foundations of Reading Instruction	3.0
LTCY 523	Diagnostic Reading Procedures for Classroom Teachers	3.0
LME 535	Survey of Educational Technology Practices	3.0
LME 537	Principles of Educational Technology Practices	3.0
PSY 510	Advanced Education Psychology	3.0
PSY 511	Psychology of Learning	3.0

**Research Foundations (3 hours)**

EDFN 500	Research Methods	3.0
or equivalent as approved by advisor		

**Students may take one of the following two options:**

**Thesis Option (6 hours)**

ADED 599	Thesis	6.0
or		

**Non-Thesis Option (6 hours)**

EDU 590	Adult Education Practicum	3.0
ADED 597	Directed Study in Adult Education	3.0

**2. Rationale**

2.1 Reasons for developing the proposed major program: Adult education is typically the means by which adults work to improve basic skills, literacy skills, technical skills, and learning skills. In the field of adult education it is widely recognized that adults approach learning differently than children. Knowles (1984) identifies five ways adults are different than children in their learning. When adults are determined to learn, they are usually self-directed, possess a great deal of experience upon which to draw, are ready to learn, are more oriented to learning, and are motivated to learn. In adult education settings the instructor often takes the role of a facilitator rather than a lecturer and is seen more as a coach or a guide.

Adult education commonly takes place in centers or programs that address skills necessary to pass the general equivalency diploma (GED) or workplace skills. These skills are often expanded in the workplace as employees work to improve specific technical skills for operating machinery or computers. Adult education also takes place in community organizations such as Community Education or churches. One of the most common places adult education takes place is in the technical and community colleges where students are taught trade skills and basic skills for multiple occupations such as agriculture, business, healthcare, computer science, office management, and paralegal. Thus, adult education takes place in multiple settings.

Currently, approximately 40% of Kentucky's working age adults are performing at the bottom two levels of literacy skills (Kentucky Adult Literacy Survey, 1997). Although this is comparable to the national average, it should be noted that the national average includes senior citizens while the Kentucky Adult Literacy Survey (KALS) did not. According to National Center for Education Statistics (2003), the percentage of adults participating in adult education grew from 33% in 1990 to 44.5% in 1999. A recent study from the U.S. Office of Vocational and Adult Education indicated that student enrollment in Vocational and Technical Education rose from approximately 9.5 million in 2000-2001 to a little over 12 million in 2001-2002. As employers continue to expect their workforce to be better qualified and degreed, the number of adults participating in adult education is expected to grow. However, Kentucky is falling behind in meeting that demand.

Demand for qualified adult educators is on the rise. Currently, over 120,000 Kentucky adults are enrolled in adult education (KYAE Report Card, 2004). Overall employment of adult educators is expected to grow in the next 8 to 10 years "faster than average" according to the Occupational Outlook Handbook at a rate of 21 to 35% in the next ten years (Occupational Outlook Handbook, 2004-05 Edition, <http://www.bls.gov/oco>). Monster.com listed 1,250 position ads and Jobs.com listed 1,334 position ads for adult educators in the last 30 days on October 21, 2004. Careerbuilder.com (retrieved from <http://careerbuilder.com> on January 21, 2005) indicated that there were over 3,200 jobs requiring skills in adult education. A quick search in The Chronicle of Higher Education (<http://chronicle.com/>, retrieved on January 21, 2005) indicated that over 1,500 jobs were posted seeking individuals who can train or teach in adult education settings. The Kentucky Adult Education, Council on Postsecondary Education has indicated that approximately 7% of adult educator positions are vacant out of approximately 750 full-

time and part-time positions. Of these, almost 84% are full-time instructors. As a result, it will become increasingly necessary for qualified instructors to be hired to handle these rising numbers.

There is a demand for adult educators, but Western Kentucky University has no program to train them. Our education programs train adults to teach children but not adults. Currently, several adult education courses have been developed and are being offered through the EBSS program out of the College of Education and Behavior Sciences where students take them to become adult educators. However, with the proposed program, prospective adult educators will be able to follow a program specifically focused for their needs and the needs of the Commonwealth.

2.2 Projected enrollment in the proposed major program: 15 or more students per year. Currently, there are 17 students following Adult Education course work through the M.A.E. in Education and Behavioral Science Studies. However, demand is expected to rise in both the EBSS program and the proposed M.A.E. in Adult Education program. In recent months there has been increased interest in the MAE: EBSS program among area KCTCS faculty who are exploring options for completing a master's degree. Many of the programs offered by KCTCS institutions are technical ones for which there is no discipline-related master's degree (or even a baccalaureate degree). To meet accreditation standards for faculty to have master's degrees, the instructors in these technical programs may choose to pursue the M.A.E. in Adult Education.

2.3 Relationship of proposed major program to other programs offered by the department/unit:

The proposed Masters of Arts in Education in Adult Education is similar to the M.A.E. in Literacy in that it prepares educators to work with adult students but, it differs because the M.A.E. in Adult Education focuses on the process of teaching adults whereas the M.A.E. in Literacy focuses on teaching literacy skills to students of all ages. Similarly, the M.S. in Library Media Science and M.A.E. in Exceptional Education-Learning and Behavioral Disorders focus on providing teachers the means to work with library patrons and students in special education settings, respectively. Each of these programs instruct graduates who may serve, work with, and teach adults, but the programs' foci lies in their respective areas and not in the theory and methods for teaching adults. Consequently, students in each program may find benefits to taking courses in the proposed M.A.E. in Adult Education program, and students in the proposed program may find electives to take in the above mentioned programs.

2.4 Relationship of proposed major program to other university programs:

The proposed M.A.E. in Adult Education is similar to M.A.E. in Student Affairs in Higher Education which trains graduates to work with adults but dissimilar because the M.A.E. in Adult Education focuses on enhancing adult learning whereas Student Affairs seeks to enhance the learning environment by providing services that promote academic,

cultural, social, physical, and personal growth. The proposed M.A.E. in Adult Education is similar to the Masters degree in Architectural and Manufacturing Sciences, which provides course work to graduate students seeking to work in Industrial Technology Education but, until recently, has not provided a graduate degree or certification. Currently, students interested in adult education obtain their masters through the M.A.E. in Education and Behavioral Sciences Studies. With the establishment of this proposed M.A.E. in Adult Education, these students would move from the M.A.E. in EBSS into the M.A.E. in Adult Education.

## 2.5 Relationship of proposed major program to similar programs offered elsewhere in Kentucky and in other states (including programs at benchmark institutions):

Few of Western Kentucky University's benchmark universities offer a master's degree in Adult education. However, Morehead State University and four of our benchmark universities offer a degree either directly related to adult education or pertaining to adult education. Morehead State University offers a 30-hour master's degree and a Specialist in Education degree in Adult and Higher Education with a focus on higher education. As for our benchmark universities, Ball State University offers a 30-hour master's degree in Adult and Community Education through face-to-face, internet, or televised classes. California State University at Chico offers a 12-credit hour certificate in Community College Faculty Preparation/Adult Education with an emphasis on community college faculty and adult education. Oakland University offers a 36-credit hour master's degree in Training and Development out of its Department of Human Resource and Development. Students have the option of choosing one of two paths: Instructional Design and Technology or Organizational Development and Leadership. Both of these paths focus on training and development, program planning and evaluation, and instructional design. Western Illinois University offers a 32-credit hour Master of Science in Education with the option to select an Adult Education track that allows students to focus on learning in adulthood and adult education and the culturally diverse. While each of these programs focuses on training of adults, the proposed M.A.E. in Adult Education would provide a unique program tailored to the needs of the Commonwealth and WKU's service region.

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

The proposed program is within the mission of the University because it supports the development of individuals who seek lifelong learning opportunities. By providing this proposed program online, the university would also serve the needs of adult educators in and around the Commonwealth of Kentucky as well as globally. This proposed program would assist adult educators in becoming more highly qualified to work with adults and their educational projects and satisfy the five key questions of Kentucky's Council on Postsecondary Education. Qualified adult educators will be able to prepare more Kentuckians for postsecondary education. This will, it is hoped, lead to more students enrolling in postsecondary education and allow them to advance through postsecondary settings. As more Kentuckians advance through postsecondary education, the Commonwealth of Kentucky will benefit from improved knowledge and academic

skills. Finally, this proposed program would help Kentucky meet the goals of its mission to increase adult literacy and work skills. As families become better prepared in basic skills, their families and children will be better equipped to attend elementary, secondary, and postsecondary education; increase college attendance and completion; and bring a better economy and opportunities to Kentucky.

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

The objectives of the proposed program are as follows:

- a. Students will be able to apply a generalist approach to adult education that promotes a flexible framework to working with adult learners
- b. Students will be able to teach using an inclusive model of adult learning and development
- c. Students will be able to incorporate research on current techniques, methods, and theories used in the field of adult education into their practice.
- d. Students will be able to evaluate the historical importance of adult education events and their impact on current adult education practices and theories.
- e. Students will work towards becoming reflective practitioners capable of developing and growing to meet the changing needs of their adult learners.

### **4. Program description**

#### **4.1 Curriculum:**

##### **Core Courses (15 hours)**

<u>Course</u>	<u>Name</u>	<u>Credit</u>
<u>Hours</u>		
ADED 510	Introduction to Adult Education	3.0
ADED 520	Methods for Teaching Adults	3.0
ADED 530	Program Planning for Adults	3.0
ADED 540	History and Philosophy of Adult Education	3.0
ADED 611	Adult Learning and Development	3.0

**Electives (6 hours)** Course may be selected from the following or from other courses with prior approval of advisor.

ADED 598	Adult Education Seminar	3.0
CNS 555	Social and Cultural Diversity in Counseling	3.0
CNS 556	Developmental Career Counseling	3.0
CNS 557	Human and Family Development in Counseling	3.0
CNS 572	American College Student	3.0
CNS 574	Student Development in Higher Education	3.0
CNS 577	Counseling Concepts and Applications for Student Affairs Professionals	3.0
CNS 580	Family Life Studies	3.0
CNS 586	Parenting Issues	3.0
CNS 667	Drug Abuse Counseling	3.0

CNS 670	Parameters of Law in Student Affairs and Higher Education	3.0
EXED 516	Exceptional Child: Perspectives and Issues	3.0
EXED 518	Seminar: Contemporary Challenges in Spec. Ed.	3.0
EXED 534	Seminar: Research in Exceptional Child Education	3.0
LTCY 519	Foundations of Reading Instruction	3.0
LTCY 523	Diagnostic Reading Procedures for Classroom Teachers	3.0
LME 535	Survey of Educational Technology Practices	3.0
LME 537	Principles of Educational Technology Practices	3.0
PSY 510	Advanced Education Psychology	3.0
PSY 511	Psychology of Learning	3.0

**Research Foundations (3 hours)**

EDFN 500	Research Methods	3.0
or equivalent as approved by advisor		

**Students may take one of the following two options:**

**Thesis Option (6 hours)**

ADED 599	Thesis	6.0
or		

**Non-Thesis Option (6 hours)**

EDU 590	Adult Education Practicum	3.0
ADED 597	Directed Study in Adult Education	3.0

4.2 Accreditation, certification, and/or licensure: Not Applicable.

4.3 Program delivery: Primarily through distance delivery, including online.

## 5. Resources

5.1 Faculty: Currently, Dr. Jim Berger teaches all adult education courses at Western Kentucky University. He has both a master's degree and a doctorate in adult education. He has conducted several studies in the field of adult education and its impact on instructors and students, and suggested policy changes to people at the local, state, and national levels.

5.2 Technological and electronic informational resources (e.g., databases, e-journals, etc.): Use of Blackboard or other course delivery system.

5.3 Facilities and equipment: none.

## 6. Proposed term for implementation: Spring, 2007

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

SIP Department	March 3, 2006
CEBS College Curriculum Committee	May 2, 2006
Graduate Council	June 8, 2006
University Senate	_____

**Attachments: Program Inventory Form**

References

Knowles, M. S. (1984). *Andragogy in Action* San Francisco: Jossey-Bass Publishers

Proposal Date: 3/28/2006

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

Contact Person: Wanda Weidemann e-mail: [wanda.weidemann@wku.edu](mailto:wanda.weidemann@wku.edu) Phone: 5-6211

**IDENTIFICATION OF COURSE**

Course prefix (subject area) and number: MATH 501

Title: Introduction to Probability and Statistics I

Credit hours: 3

**CURRENT CATALOG COURSE LISTING:**

- COMBINATIONS AND PERMUTATIONS; BASIC THEOREMS OF PROBABILITY; MATHEMATICAL EXPECTATION; DISPLAYS OF UNIVARIATE AND BIVARIATE DATA; SAMPLING; STATISTICAL APPLICATIONS. (NOT APPLICABLE TO THE M.S. DEGREE IN MATHEMATICS OR M.A.E. DEGREE IN SECONDARY EDUCATION.)

**PROPOSED CATALOG COURSE LISTING:**

- INTERPRETING AND ANALYZING UNIVARIATE AND BIVARIATE DATA; DATA COLLECTION; PLANNING AND CONDUCTING EXPERIMENTS; PROBABILITY AND SAMPLING DISTRIBUTIONS; STATISTICAL INFERENCE. (NOT APPLICABLE TO THE M.S. DEGREE IN MATHEMATICS.)

**RATIONALE FOR THE REVISION OF CATALOG COURSE LISTING:**

- WHEN THE DEPARTMENT OF MATHEMATICS DECIDED TO SEPARATE THE EDUCATION AND GENERAL OPTIONS OF THE M.S. DEGREE INTO TWO DIFFERENT DEGREES, AN ATTEMPT WAS MADE TO STOP THE COURSE REVISION FOR THIS COURSE BEFORE IT WENT TO THE UNIVERSITY SENATE. DUE TO A COMMUNICATION ERROR, THE REVISION OF THE COURSE CATALOG LISTING WENT THROUGH. THE DEPARTMENT HAS DECIDED NOT TO MAKE MATH 501 A COURSE FOR MIDDLE SCHOOL TEACHERS BUT TO MAKE THE COURSE MORE ALIGNED WITH THE KNOWLEDGE THAT HIGH SCHOOL TEACHERS NEED IN ORDER TO TEACH AP STATISTICS EFFECTIVELY.

**PROPOSED TERM FOR IMPLEMENTATION: FALL, 2006**

**DATES OF PRIOR COMMITTEE APPROVALS:**

Department of Mathematics 03-28-2006

OCSE Graduate Committee 04-14-2006

Graduate Council 06-08-2006

Professional Education Council 06-14-06

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

**Attachment: [Course Inventory Form](#)**

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

Contact Person: Ferhan Atici e-mail: ferhan.atici@wku.edu Phone: 745-6229

**1. Identification of proposed course**

- 1.1 Prefix and number: MATH 542
- 1.2 Title: Advanced Topics in Discrete Mathematics
- 1.3 Abbreviated title: Adv Discrete Math.
- 1.4 Credit hours and contact hours: 3
- 1.5 Type of course: L (lecture)
- 1.6 Prerequisites: Math 310 and Math 317
- 1.7 Catalog course listing: Combinatorics, ordered sets and lattice theory, modeling with difference equations, discrete calculus, dynamic equations on time scales.

**2. Rationale**

- 2.4 Reason for developing the proposed course:

The development of discrete mathematics is being driven by widespread industrial applications. We have several faculty members who are actively engaged in areas of discrete mathematics. This course will provide our students with greater facility at modeling and solving problems in applied mathematics.

- 2.2 Projected enrollment in the proposed course: 12 students per offering year.

It is anticipated that this course will have the same audience as our other graduate courses in applied mathematics.

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

The course will build upon Math 310 Discrete Mathematics, which is a required course for mathematics majors. Though the material of Math 541 Graph Theory is generally considered to be one of the many branches of discrete mathematics, the proposed course will have little overlap with Math 541.

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

CS 338 Computer Science III is an undergraduate level course on topics in discrete mathematics with emphasis on computer science.

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

Most institutions with a graduate program in mathematics offer one or more courses in discrete mathematics or particular subjects within discrete mathematics. The University of Kentucky offers a graduate level Topics in Discrete Mathematics course. The University of Louisville offers 15 hours of graduate courses in discrete mathematics (Combinatorics and Graph Theory I and II and Advanced Combinatorics and Graph Theory I and II, Seminar in Discrete Mathematics). Vanderbilt University offers graduate courses in Combinatorics, Graph Theory, and Lattice Theory and the Theory of Ordered sets.

## 3. Discussion of proposed course

### 3.1 Course objectives:

Students will

- learn to apply combinatorial counting techniques to applied problems in various areas of mathematics.
- develop their problem solving-abilities.
- recognize that many techniques in discrete mathematics are analogous to techniques in continuous mathematics.
- encounter open problems in mathematics and be encouraged to pursue them.

### 3.2 Content outline:

- Discrete calculus with all its aspects.
- Difference equations; Classifications and method of solving equations.
- Time scale calculus.
- Combinatorial theory.
- Partially ordered sets and lattices.

### 3.3 Student expectations and requirements:

Grading will be based on in-class tests, homework assignments or projects, and the comprehensive final exam.

### 3.4 Tentative texts and course materials:

- Difference Equations; An Introduction with Applications, Walter Kelley and Allan Peterson, 2001 Academic Press.
- Dynamic Equations on Time Scales; An Introduction with Applications, Martin Bohner and Allan Peterson, 2001, Birkhauser.
- Introduction to Lattices and Order, 2<sup>nd</sup> Edition, B. A. Davey and H. A. Priestley, 2002, Cambridge University Press.

Additional material will be developed as a course handout to supplement the above text.

**4. Resources**

4.1 Library resources:

See attached course bibliography and library resources form.

4.2 Computer resources:

Existing computer laboratories in the Mathematics Department are adequate.

**5. Budget implications**

5.1 Proposed method of staffing: Current graduate faculty.

5.2 Special equipment needed: None.

5.3 Expendable materials needed: None.

5.4 Laboratory supplies needed: None.

**6. Proposed term for implementation:** Fall 2007

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

Mathematics Department Graduate Faculty 3/28/06

Ogden Graduate Curriculum Committee 4/14/06

Graduate Council 6/8/06

University Senate

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**Attachments: Bibliography, Library Resources Form, Course Inventory Form**

**College of Education and Behavioral Sciences**  
**Department of Psychology**  
**Proposal to Revise a Program**  
(Action Item)

Contact Person: Dr. Carl Myers    e-mail: [carl.myers@wku.edu](mailto:carl.myers@wku.edu)    Phone: 745-4410

**1. Identification of program**

1.1 Reference Number: 147

1.2 Current Program Title: Education Specialist: School Psychology

1.3 Credit Hours: 75

**2. Identification of the proposed changes:**

- Delete the three-hour ELED 503 or ELED 603 (elementary curriculum) course requirement.
- Delete the one-hour PSY 515 (Program Evaluation Laboratory) course requirement.
- Substitute LTCY 520 (Clinical Diagnosis of Reading Abilities) for LTCY 519 (Foundations of Reading Instruction).

**3. Current and proposed curricula on following pages:**

<b>CURRENT PROGRAM:</b>	<b>Credit hours</b>	<b>PROPOSED PROGRAM:</b>	<b>Credit hours</b>
<b>ELED 503 or ELED 603 (elementary curriculum)</b>	<b>3</b>		
<b>LTCY 519 Foundations of Reading Instruction</b>	<b>3</b>	<b>LTCY 520 Clinical Diagnosis of Reading Abilities</b>	<b>3</b>
PSY 514 Program Evaluation	3	PSY 514 Program Evaluation	3
<b>PSY 515 Program Evaluation Laboratory</b>	<b>1</b>		
PSY 540 Behavior Problems of Childhood and Adolescence	3	PSY 540 Behavior Problems of Children and Adolescence	3
PSY 541 Professional Issues and Ethics in Psychology	3	PSY 541 Professional Issues and Ethics in Psychology	3
PSY 545 Clinical Child Psychology: Theory and Practice	3	PSY 545 Clinical Child Psychology: Theory and Practice	3
PSY 552 Advanced Social Psychology	3	PSY 552 Advanced Social Psychology	3
PSY 580 Advanced Physiological Psychology	3	PSY 580 Advanced Physiological Psychology	3

PSY 641 Theories of Psychotherapy	3	PSY 641 Theories of Psychotherapy	3
PSY 519 Psychological Perspectives on Classroom Behavior	3	PSY 519 Psychological Perspectives on Classroom Behavior	3
PSY 560 Assessment of Cognitive and Intellectual Functioning	3	PSY 560 Assessment of Cognitive and Intellectual Functioning	3
PSY 561 Advanced Assessment in Educational Settings	3	PSY 561 Advanced Assessment in Educational Settings	3
PSY 562 Practicum in Psychological Assessment	6	PSY 562 Practicum in Psychological Assessment	6
PSY 643 Psychoeducational Assessment	3	PSY 643 Psychoeducational Assessment	3
PSY 645 Consultation in Educational and Mental Health Settings	3	PSY 645 Consultation in Educational and Mental Health Settings	3
PSY 512 Seminar in Experimental Design	3	PSY 512 Seminar in Experimental Design	3
PSY 511 Psychology of Learning	3	PSY 511 Psychology of Learning	3
PSY 521 Advanced Child Psychology	3	PSY 521 Advanced Child Psychology	3
PSY 563 Statistics and Psychometric Theory	3	PSY 563 Statistics and Psychometric Theory	3
PSY 662 Practicum in Psychology	2	PSY 662 Practicum in Psychology	2
PSY 699 Specialist Project	6	PSY 699 Specialist Project	6
PSY 592 Internship	6	PSY 592 Internship	6
<b>TOTAL</b>	<b>75 Hours</b>		<b>TOTAL</b> <b>71 Hours</b>

#### 4. Rationale

- The ELED 503 or 603 course requirement is being eliminated for two primary reasons: (i) the National Association of School Psychologists (NASP) accreditation standards have not required a course on curriculum since the 1994 revisions, and (ii) annual surveys of our graduates consistently indicate the course provides little information that is relevant for their role as school psychologists. Furthermore, national accreditation standards for school psychologists only require 60 graduate hours although most programs have more than the minimum. Of the two other specialist level school psychology programs in Kentucky, Eastern Kentucky University requires 71 hours while the University of Kentucky requires 69 hours. Thus, decreasing the number of required hours in our program makes our program more comparable and competitive with the course requirements of other school psychology programs in the state.
- The one-hour PSY 515 course is being eliminated because it is not deemed necessary. Currently, students take PSY 515 (Program Evaluation Laboratory) in conjunction with the three-hour course, PSY 514 (Program Evaluation). Students are required to complete a project in PSY 514 but the project is not “above and beyond” the requirements for a project in any other graduate level course.

- School psychologists are frequently involved in the assessment of students' reading difficulties. In talking with the faculty of the Literacy department, the faculty determined that LTCY 520 would provide more useful information to our students than LTCY 519.

**5. Proposed term for implementation:** Spring, 2007

The revised program will be in effect for all students filing Form B/C beginning January 1, 2007, and thereafter. Current students with approved programs on file will be allowed to submit revised programs.

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

Department of Psychology	<u>5/12/06</u>
CEBS Curriculum Committee	<u>6/6/06</u>
Professional Education Council	<u>6/14/06</u>
Graduate Council	<u>7/13/06</u>
University Senate	_____

**Attachment: Program Inventory**

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

Contact Person: Tom Richmond e-mail: tom.richmond@wku.edu Phone: 5-6219

**IDENTIFICATION OF PROGRAM**

Reference Number: 085

Current Program Title: Master of Science in Mathematics

Credit hours: 30

**IDENTIFICATION OF THE PROPOSED CHANGES:**

The "General" and "Education" options in the M.S. in Mathematics are being eliminated. The requirements of the degree are being better tailored to meet the needs of the students who previously would have selected the General Option.

Proposed Requirements

MATH 417G Algebraic Systems

Theory

MATH 439G Topology

MATH 431G Intermediate Analysis I  
MATH 532 Real Analysis  
532,

prerequisite

An Applied Math course chosen from:

STAT 549 Statistical Methods I  
MATH 529 Applied Probability  
MATH 531 Adv. Differential Eqns.

Applications to

MATH 535 Adv. Applied Math. I  
Mathematics  
MATH 536 Adv. Applied Math II  
MATH 540 Stochastic Processes  
MATH 541 Graph Theory  
MATH 542 Advanced Topics in Discrete Math

Current Requirements

MATH 417G Algebraic Systems

OR MATH 415G Algebra and Number

MATH 439G Topology

OR MATH 423G Geometry II

An analysis course.

General Option requires MATH

which has MATH 431 as a

STAT 549 Statistical Methods I

MATH 504 Computer

Problems in

MATH 550 Complex Analysis	Any two year-long sequences for
MATH 570 Topics in Operations Research	thesis students. One year-long
non- A year long sequence from an approved list. sequence	for thesis students.

**DETAILED PROGRAM DESCRIPTION:**

The Department of Mathematics offers the M.S. degree and the M.A. degree. Both degrees have thesis and non-thesis options, and both require 30 hours of graduate-level courses. The M.S. requires traditional courses in analysis, algebra, topology, and applied mathematics, and is recommended for students planning to pursue a Ph.D. degree or technical industrial employment. The M.A. degree is designed for students interested in careers in secondary education.

The M.S. in Mathematics requires a minimum of 30 hours of graduate-level mathematics courses. The following are required:

- (1) Algebra: MATH 417G
- Analysis: MATH 431G
- Topology: MATH 439G

If equivalent courses were taken at the undergraduate level, then the student must substitute appropriate graduate mathematics courses selected in consultation with a Mathematics Department graduate advisor.

- (2) An applied Mathematics course selected from MATH 529, 531, 535, 536, 540, 541, 542, 550, 570, STAT 549, or as approved by the Departmental Graduate Committee
- (3) MATH 532
- (4) One of the following two-course sequences:  
MATH 417G-517, 439G-539, 450G-550, 435G-535, 470G-570, 529-540, 435G-531, 535-536; 405G-406G can be taken by students who have substituted a 500-level course for at least one of the three courses listed in (1).

Students who chose to write a thesis are required to complete 6 hours of MATH 599 – Thesis Research and Writing and to give an oral defense of the thesis.

The remaining mathematics courses in the student's program must be chosen from MATH 405G, 406G, 415G, 423G, 435G, 450G, 470G, 504, 517, 523, 529,

531, 535, 536, 539, 540, 541, 542, 550, 560, 570, 590 or STAT 549.

A maximum of 12 hours at the 400G-level may be included in the entire program.

A research tool is required and may entail coursework beyond the 30 hours of mathematics. The research tool must be completed during the first 15 hours of coursework and may be fulfilled by a mathematics reading course, a computer science course, a foreign language examination, or another option approved by a Mathematics Department graduate advisor.

In addition, all students in the M.S. program must have a working knowledge of a high-level programming language or computer algebra system.

A student may, upon prior approval of the Mathematics Department Graduate Committee, include in his/her program a maximum of 6 hours of course work from a related field.

Comprehensive exams are required.

Admission Requirements for the M.S.:

- (1) A GAP score of 3000.
- (2) Completion of the following undergraduate courses: (a) a calculus sequence through multivariable calculus; (b) linear algebra; (c) discrete mathematics; (d) an applied mathematics course (e.g. differential equations, probability, calculus-based statistics, numerical analysis); (e) abstract algebra.
- (3) A cumulative grade point average of at least 3.0 (on a 4.0 scale) in at least one of the following: (i) all mathematics courses that are applicable to the undergraduate mathematics major; or (ii) courses specified in (b) through (e) of Item 2 above.

Admission may be granted to a student having at most one deficiency in the undergraduate courses listed in Item 2.

#### **RATIONALE FOR PROPOSED PROGRAM REVISIONS:**

Since the suspension of the M.A.E. Mathematics Major in 2003, the Department of Mathematics has offered the M.S. degree with "General" and "Education" options. The background, needs, and aspirations of students in these two options are quite different. To be more responsive to the needs of traditional M.S. students and secondary teachers pursuing a Masters in mathematics, as well as to attract mathematically talented students with broader interests in other scientific disciplines, the Department of Mathematics is proposing a new M.A. in Mathematics and revisions to the M.S. The proposed changes will modify our degree

offerings to meet the increasing demand for industrial employees with better technological skills and for secondary teachers with deeper content preparation.

**PROPOSED TERM FOR IMPLEMENTATION AND SPECIAL PROVISIONS:**

**Term:** Spring, 2007

**Provisions, if applicable:** Not applicable.

**DATES OF PRIOR COMMITTEE APPROVALS:**

Department of Mathematics	03-28-06
OCSE Graduate Committee	05-05-06
Professional Education Council	06-14-06
Graduate Council	07-13-06
University Senate	

**Attachment:** [Program Inventory Form](#)

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

Contact Person: Wanda Weidemann e-mail: [wanda.weidemann@wku.edu](mailto:wanda.weidemann@wku.edu) Phone: 5-6211

**IDENTIFICATION OF PROPOSED COURSE**

Prefix and number: MATH 511

Title: Secondary Mathematics from an Advanced Perspective I

Abbreviated title: Sec Math Adv Perspective I

Credit hours and contact hours: 3

Type of course: C (Lecture/Lab)

Prerequisites: Mathematics major, mathematics minor or permission of instructor

Catalog course listing:

Intended for teachers wishing to develop a deeper understanding of underlying concepts of algebra and calculus. Examines links among different fields of mathematics and connections among high school, college, and higher mathematics. (Not applicable to the M.S. degree in Mathematics.)

**RATIONALE**

**2.8 REASON FOR DEVELOPING THE PROPOSED COURSE:**

NUMEROUS REPORTS ABOUT THE QUALITY OF EDUCATION CITE LACK OF TEACHER KNOWLEDGE AS CONTRIBUTING TO POOR STUDENT PERFORMANCE. TEACHER SHORTAGES AND COMPETITION FOR COMPETENT MATHEMATICS GRADUATES ARE FORCING SCHOOL DISTRICTS TO EMPLOY THOSE TEACHERS WHO WERE NOT NECESSARILY THE TOP MATHEMATICS SCHOLARS. MOST EXISTING MATHEMATICS GRADUATE COURSES ARE DESIGNED TO PREPARE MATHEMATICIANS FOR TECHNICAL JOBS OR PH.D. PROGRAMS. SINCE MOST SECONDARY TEACHERS WILL NEVER TEACH A COURSE BEYOND AP CALCULUS OR AP STATISTICS, THEY HAVE A HARD TIME RELATING TO GRADUATE LEVEL MATHEMATICS COURSES BECAUSE THE CONTENT DOES NOT RELATE TO WHAT THEY TEACH. AS A RESULT, TEACHERS OFTEN CHOOSE OTHER GRADUATE OPTIONS (SUCH AS COUNSELING OR ADMINISTRATION) RATHER THAN TAKING ADDITIONAL MATHEMATICS COURSES. THIS COURSE IS SPECIFICALLY DESIGNED TO SOLIDIFY AND DEEPEN TEACHERS' CONCEPTUAL KNOWLEDGE OF HIGH SCHOOL MATHEMATICS AND THEN TO HELP THEM SEE HOW HIGH SCHOOL MATHEMATICS TOPICS DEVELOP INTO HIGHER-LEVEL MATHEMATICS.

Projected enrollment in the proposed course:

10-12 students every other year based on expected attractiveness of a flexible web-based Master's degree option for teachers.

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

This course will be included in the proposed Master of Arts in Mathematics program and will be related to another proposed new course Math 512, Secondary Mathematics from an Advanced Perspective II, which will focus on geometry with connections to the algebra and analysis (calculus) taught in this first course.

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

The course will be acceptable for the M.A.E. degree with a mathematics minor.

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

The University of Missouri-St. Louis has a similar course, but it covers selected topics in one semester. Students at WKU will be able to choose this course and MATH 512 as a two-semester sequence.

## **DISCUSSION OF PROPOSED COURSE**

Course objectives:

The student will

- Use alternative approaches to teaching mathematical ideas
- Develop extensions and generalizations of familiar theorems
- Learn new applications of mathematics to use in high school mathematics classes
- Analyze common problems of high school mathematics from a deeper mathematical level
- Connect ideas that may have been studied separately in different courses
- Learn new ways to challenge gifted secondary students.

Content outline:

- Real and complex numbers and their representations
- Analyzing functions: composite, inverse, monotone, linear, exponential, polynomial; limits
- Equations: equivalence, isomorphism, solving various types
- Integers and polynomials: recursion, mathematical induction, divisibility, division algorithm, Fundamental Theorem of Arithmetic
- Number system structure: modular arithmetic, ordered fields, Archimedean and complete ordered fields

Student expectations and requirements:

Exams, papers, projects

Tentative texts and course materials:

Mathematics for High School Teachers: An Advanced Perspective by Usiskin, Peressini, Marchisotto & Stanley (Prentice Hall, 2003)

## RESOURCES

## Library resources:

See attached Course Bibliography and Library Resources Form.

## Computer resources:

## Access to DELO facilities for making course available on the web

## BUDGET IMPLICATIONS

### Proposed method of staffing:

### Existing graduate faculty

### Special equipment needed:

## Access to DELO facilities for making course available on the web

### Expendable materials needed:

none

### Laboratory supplies needed:

none

## PROPOSED TERM FOR IMPLEMENTATION: SPRING, 2007

#### **Dates of prior committee approvals:**

Math Department Graduate Committee	<u>03-26-06</u>
Department of Mathematics	<u>03-28-06</u>
OCSE Graduate Committee	<u>05-05-06</u>
Professional Education Council	<u>06-14-06</u>
Graduate Council	<u>07-13-06</u>
University Senate	<u> </u>

## Attachments: Bibliography, Library Resources Form, [Course Inventory Form](#)

Proposal Date: 3/28/2006

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

Contact Person: Wanda Weidemann    e-mail: [wanda.weidemann@wku.edu](mailto:wanda.weidemann@wku.edu)    Phone: 5-6211

**IDENTIFICATION OF PROPOSED COURSE**

Prefix and number: MATH 512

Title: Secondary Mathematics from an Advanced Perspective II

Abbreviated title: Sec Math Adv Perspective II

Credit hours and contact hours: 3

Type of course: C (Lecture/Lab)

Prerequisites: Mathematics major, mathematics minor or permission of instructor

Catalog course listing:

Intended for teachers wishing to develop a deeper understanding of underlying concepts of geometry. Examines relationships among different fields of mathematics and connections among high school, college, and higher mathematics. (Not applicable to the M.S. degree in Mathematics.)

**RATIONALE**

**2.9 REASON FOR DEVELOPING THE PROPOSED COURSE:**

NUMEROUS REPORTS ABOUT THE QUALITY OF EDUCATION CITE LACK OF TEACHER KNOWLEDGE AS CONTRIBUTING TO POOR STUDENT PERFORMANCE. TEACHER SHORTAGES AND COMPETITION FOR COMPETENT MATHEMATICS GRADUATES ARE FORCING SCHOOL DISTRICTS TO EMPLOY THOSE TEACHERS WHO WERE NOT NECESSARILY THE TOP MATHEMATICS SCHOLARS. MOST EXISTING MATHEMATICS GRADUATE COURSES ARE DESIGNED TO PREPARE MATHEMATICIANS FOR TECHNICAL JOBS OR PH.D. PROGRAMS. SINCE MOST SECONDARY TEACHERS WILL NEVER TEACH A COURSE BEYOND AP CALCULUS OR AP STATISTICS, THEY HAVE A HARD TIME RELATING TO GRADUATE LEVEL MATHEMATICS COURSES BECAUSE THE CONTENT DOES NOT RELATE TO WHAT THEY TEACH. AS A RESULT, TEACHERS OFTEN CHOOSE OTHER GRADUATE OPTIONS (SUCH AS COUNSELING OR ADMINISTRATION) RATHER THAN TAKING ADDITIONAL MATHEMATICS COURSES. THIS COURSE IS SPECIFICALLY DESIGNED TO SOLIDIFY AND DEEPEN TEACHERS' CONCEPTUAL KNOWLEDGE OF HIGH SCHOOL GEOMETRY AND THEN TO HELP THEM SEE HOW HIGH SCHOOL MATHEMATICS TOPICS DEVELOP INTO HIGHER-LEVEL MATHEMATICS.

Projected enrollment in the proposed course:

10-12 students every other year based on expected demand for online courses for teachers

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

This course will be included in the proposed Master of Arts in Mathematics program and will be related to another new course Math 511, Secondary Mathematics from an Advanced Perspective I which will focus on algebra and analysis (calculus) with connections to the geometry taught in this second course.

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

The course will be acceptable for the M.A.E. degree with a mathematics minor.

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

The University of Missouri-St. Louis has a similar course, but it covers selected topics in one semester. Students at WKU can choose this course and MATH 511 as a two-semester sequence.

## **DISCUSSION OF PROPOSED COURSE**

Course objectives:

The student will

- Use alternative approaches to teaching mathematical ideas
- Develop extensions and generalizations of familiar theorems
- Learn new applications of mathematics to use in high school mathematics classes
- Analyze common problems of high school mathematics from a deeper mathematical level
- Connect ideas that may have been studied separately in different courses
- Learn new ways to challenge gifted secondary students.

Content outline:

- Congruence, transformations, and symmetry
- Distance and locus in 2 and 3 dimensions
- Similarity and similarity transformations; scaling
- Properties of trigonometric functions
- Area and volume: minimizing area, regions bounded by curves, isoperimetric inequalities, fractional dimension
- Axiomatic and Euclidean Geometry; relationships between a mathematical theory and its model

Student expectations and requirements:

Exams, papers, projects

Tentative texts and course materials:

Mathematics for High School Teachers: An Advanced Perspective by Usiskin, Peressini, Marchisotto & Stanley (Prentice Hall, 2003)

## **RESOURCES**

Library resources:

See attached Course Bibliography and Library Resources form.

Computer resources:

Access to DELO facilities for making course available on the web

## **BUDGET IMPLICATIONS**

Proposed method of staffing:

Existing graduate faculty

Special equipment needed:

Access to DELO facilities for making course available on the web

Expendable materials needed:

none

Laboratory supplies needed:

none

## **PROPOSED TERM FOR IMPLEMENTATION: SPRING, 2007**

### **Dates of prior committee approvals:**

Math Department Graduate Committee	<u>03-24-06</u>
Department of Mathematics	<u>03-28-06</u>
OCSE Graduate Committee	<u>05-05-06</u>
Professional Education Council	<u>06-14-06</u>
Graduate Council	<u>07-13-06</u>
University Senate	_____

**Attachments: Bibliography, Library Resources Form, [Course Inventory Form](#)**

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

Contact Person: Wanda Weidemann e-mail: [wanda.weidemann@wku.edu](mailto:wanda.weidemann@wku.edu) Phone: 5-6211

**IDENTIFICATION OF PROPOSED COURSE**

Prefix and number: MATH 514

Title: Applications and Modeling for Secondary Teachers

Abbreviated title: App Modeling Sec Tchr

Credit hours and contact hours: 3

Type of course: C (Lecture/Lab)

Prerequisites: Mathematics major, mathematics minor or permission of instructor

Catalog course listing:

Utilizes concepts from many fields of mathematics to explore how high school and college mathematics is used in real world settings. Intended for secondary teachers. (Not applicable to the M.S. degree in Mathematics.)

**RATIONALE**

**2.10 REASON FOR DEVELOPING THE PROPOSED COURSE:**

ONE QUESTION THAT IS MOST FREQUENTLY ASKED OF HIGH SCHOOL TEACHERS IS "WHERE AM I EVER GOING TO USE THIS?" AN ALL TOO COMMON ANSWER IS "YOU WILL NEED THIS FOR YOUR NEXT MATHEMATICS COURSE." THE UNDERGRADUATE MATHEMATICS CURRICULUM FOR MANY HIGH SCHOOL TEACHERS WAS EITHER VERY THEORETICAL OR EMPHASIZED APPLICATIONS THAT ARE TOO SOPHISTICATED FOR USE IN HIGH SCHOOL MATHEMATICS CLASSES. THE PURPOSE OF THIS COURSE IS TO INTRODUCE TEACHERS TO REAL WORLD APPLICATIONS OF MATHEMATICS WHILE EXTENDING THEIR OWN MATHEMATICAL KNOWLEDGE TO INCLUDE THE AREA OF MATHEMATICAL MODELING.

Projected enrollment in the proposed course:

10-12 students every other year based on the expected demand for online courses for teachers

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

The Department of Mathematics offers MATH 305 Introduction to Mathematical Modeling. Most undergraduate mathematics majors pursuing teacher certification do not take this course, possibly because they have so few elective hours. MATH 514 would begin with applications accessible to high school students and build higher level mathematics from many areas of mathematics that students studied as undergraduates, including geometry, algebra, calculus, probability, and statistics.

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

No similar courses exist; however the real world applications used in this course will apply to many content areas.

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

Montana State University at Bozeman has a similar course, Advanced Mathematical Modeling for Teachers.

## **DISCUSSION OF PROPOSED COURSE**

Course objectives:

Students will

- Discover how high school mathematics is applicable in real world situations
- Expand their own knowledge of mathematics by using mathematics they have learned in prior mathematics courses
- Use mathematical modeling to solve real world problems.

Content outline:

Applications of High School Mathematics

- Algebra and Precalculus
- Geometry and Trigonometry
- Calculus

Mathematical Modeling

- What is a Mathematical Model?
- Applications of Mathematical Modeling

Student expectations and requirements:

Exams, projects, participation in discussion

Tentative texts and course materials:

No text: problems will be taken from a variety of sources including those listed below.

## **RESOURCES**

Library resources:

See attached Course Bibliography and Library Resources Form.

Computer resources:

Consortium Pull-Out CD Rom (from COMAP)

The Modeling Resource CD Rom (from COMAP)

Access to DELO facilities for developing web version of this course.

## **BUDGET IMPLICATIONS**

Proposed method of staffing:

Existing graduate faculty

Special equipment needed:

none

Expendable materials needed:

none

Laboratory supplies needed:

none

## **PROPOSED TERM FOR IMPLEMENTATION: SPRING, 2007**

**Dates of prior committee approvals:**

Math Department Graduate Committee	<u>03-24-06</u>
Department of Mathematics	<u>03-28-06</u>
OCSE Graduate Committee	<u>05-05-06</u>
Professional Education Council	<u>06-14-06</u>
Graduate Council	<u>07-13-06</u>
University Senate	<u></u>

## Attachments: Bibliography, Library Resources Form, [Course Inventory Form](#)

**Ogden College of Science and Engineering  
Department of Mathematics**

***Proposal to Create a New Major Program***  
**(Action Item)**

Contact Person: Wanda Weidemann e-mail: [wanda.weidemann@wku.edu](mailto:wanda.weidemann@wku.edu) Phone: 5-6211

**IDENTIFICATION OF PROGRAM**

Title: Master of Arts in Mathematics

Degree: M.A.

Classification of Instructional Program (CIP) Code: 27.0101 Mathematics, General

Required hours in the proposed major program: 30

Special information:

This program is intended for students who already hold secondary teacher certification and are seeking Rank II teaching status through attainment of a master's degree.

Program admission requirements

A GAP score of 3000.

- (1) A bachelor's degree in mathematics or (2) completion of the following
  - undergraduate courses (a) a calculus sequence through multivariable calculus;
  - (b) linear algebra; (c) discrete mathematics; (d) probability or calculus-based statistics; (e) abstract algebra; (f) geometry.

Applicants without a bachelor's degree in mathematics may be admitted with at most one deficiency in the undergraduate courses listed in (2) above.

Catalog description

The Department of Mathematics offers the M.S. degree and the M.A. degree. Both degrees have thesis and non-thesis options, and both require 30 hours of graduate-level courses.

The M.S. degree requires traditional courses in analysis, algebra, topology, and applied mathematics and is recommended for students planning to pursue a Ph.D. degree or technical industrial employment.

The M.A. degree is designed for secondary teachers and includes courses that will help them become more knowledgeable about the mathematics they teach in high school and make connections and extensions of that knowledge to college and higher mathematics.

The M.A. degree requires a minimum of 30 hours of graduate-level courses,

including the following:

*Core Mathematics Courses*

Four of the following courses

MATH 501 Introduction to Probability and Statistics I

MATH 503 Introduction to Analysis

MATH 511 Secondary Mathematics from an Advanced Perspective I

MATH 512 Secondary Mathematics from an Advanced Perspective II (or

MATH 423G Geometry II or MATH 523 Topics from Geometry)

MATH 514 Applications and Modeling for Secondary Teachers

*Education Courses*

PSY 510 Advanced Educational Psychology or PSY 511 Psychology of Learning

SEC 580 The Curriculum

EDU 544 Classroom Teaching Strategies

SEC 534 Seminar in Mathematics Education

*Elective Courses*

Six hours of mathematics courses chosen from those listed above or

MATH

405G, 406G, 409G, 415G, 417G, 421G, 429G, 431G, 432G, 435G,

439G

450G, 470G, 475G, 500, 504, 509, 517, 531, 532, 535, 536, 539, 540,

541, 542,

550, 560, 570, 590, 599, STAT 549.

A maximum of 9 hours at the 400G level may be included in the entire program.

Comprehensive exams are required. Students must develop and submit a professional portfolio to demonstrate mastery of the Kentucky Experienced

**Teacher Standards.** A thesis student is required to complete 6 hours of MATH 599 Thesis Research and Writing and to give an oral defense of the thesis.

## **RATIONALE**

Reasons for developing the proposed major program

Since the suspension of the M.A.E. degree with a Mathematics major in 2003, the Department of Mathematics has offered the M.S. degree with "General" and "Education" options. The backgrounds, needs, and aspirations of students in these two options are quite different. To be more responsive to the needs of traditional M.S. students and secondary teachers pursuing a masters degree in mathematics, the Department of Mathematics is proposing a M.A. degree in Mathematics and revisions to the M.S degree. These changes will modify our offerings to better meet the needs of two different groups of students. The M.S. degree will meet the needs of students preparing for industry or doctoral programs while the M.A. degree will provide secondary teachers with the content knowledge essential for successful teaching.

Projected enrollment in the proposed major program

6-10 students enrolled full or part-time based on the expected demand for an online program for teachers.

Relationship of proposed major program to other programs offered by the department/unit

This program will be a logical follow up to the A.B. degree in Mathematics for those students with Teacher Certification. It will serve as an alternative to the Master of Science in Mathematics degree for those students seeking secondary certification and will share some graduate courses with that program. Both degrees include courses that address traditional core areas of graduate study in mathematics: analysis, algebra, topology/geometry, and applied mathematics. In the M.A. degree, MATH 503, MATH 511, MATH 512, and MATH 501 (or MATH 504), address these areas in context more suitable for secondary teachers.

Relationship of proposed major program to other university programs

This program shares some courses with the M.A.E. in Secondary Education with a mathematics minor, and students seeking the M.A.E. in Middle Grades Education may also take some of the proposed courses.

Relationship of proposed major program to similar programs offered elsewhere in Kentucky and in other states (including programs at benchmark institutions) Master of Arts in Teaching degrees exist at several state universities, but these are usually either degrees with emphasis on education courses or a program for initial teacher certification. The University of Louisville has a Master of Arts program which allows students the option of taking 12 hours in education. Murray State University has a Master of Arts in Teaching which allows students to take 15 hours of education classes. The

University of Kentucky has a Master of Arts degree based on a three course sequence in algebra, topology, and analysis. At Eastern Kentucky University, students may take 15 hours in areas other than mathematics (including education). The program at Western Kentucky University will be unique in that the mathematics courses are chosen in areas that will deepen, extend, and make connections with the mathematics courses that are part of the secondary mathematics curriculum.

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

This program enhances responsiveness to constituents by addressing the increasing demands for secondary teachers with deeper content preparation.

#### **OBJECTIVES OF THE PROPOSED MAJOR PROGRAM**

Graduates will be able to use multiple strategies to create proofs and solve problems in mathematics.

Graduates will be able to communicate in oral and written form at a level commensurate with that of students completing a Master's degree in mathematics.

Graduates will be well-prepared for careers as secondary mathematics teachers.

Graduates will teach secondary mathematics from a conceptual level based on their increased understanding of mathematical concepts, connections, and extensions.

## PROGRAM DESCRIPTION

## Curriculum

See attached bibliography and Library Resources form.

### Accreditation, certification, and/or licensure

Upon completion of the program, students will be eligible for Rank II Teacher Certification.

## Program delivery

### Combination of Internet (web) and on-campus courses

(If the web courses are well accepted, the whole program may become available via the Internet.)

## RESOURCES

## Faculty

### Existing graduate faculty in the department

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

Existing resources are adequate for the M.A. in Mathematics

## Facilities and equipment

## Access to DELO facilities and equipment for development of web courses

**PROPOSED TERM FOR IMPLEMENTATION: SPRING 2007**

**DATES OF PRIOR COMMITTEE APPROVALS:**

Math Department Graduate Committee	<u>03-24-06</u>
Department of Mathematics	<u>03-28-2006</u>
OCSE College Graduate Committee	<u>05-05-06</u>
Professional Education Council	<u>06-14-06</u>
Graduate Council	<u>07-13-06</u>
University Senate	<u> </u>

**Attachments: Program Inventory Form**