

AGENDA
PROFESSIONAL EDUCATION COUNCIL
3:30 - Wednesday, March 16, 2011
Gary Ransdell Hall 3073

- I. Consideration of the Minutes from the February 9, 2011 meeting (Minutes can be found on the CEBS Main Web Page – click on Faculty & Staff and then Meetings Minutes and Agendas).

- II. New Business
 - A. Office of Teacher Services-CEBS**
 - Presentation of Candidates Completing Requirements for Admission to the Professional Education Unit February 9, 2010 to March 16, 2011

 - B. Potter College of Arts and Letters**
 - 1. Revise a Program - 509, Bachelor of Arts, Visual Studies
 - 2. Revise a Program – 0439, MAE in Music Education for Teacher Leaders
 - 3. Create New Academic Degree Type – Master of Music

 - C. College of Education and Behavioral Sciences**
 - 1. New Course – LME 592, Internship in Library Media Education
 - 2. Revise Program – 083 Library Media Education

 - D. Ogden College of Science and Engineering**
 - 1. Revise Course Prerequisites/Corequisites – CHEM 314, Introduction to Organic Chemistry
 - 2. Revise Course Prerequisites/Corequisites – MATH 307, Introduction to Linear Algebra
 - 3. Make Multiple Revisions to a Course – MATH 431, Intermediate Analysis I
 - 4. Make Multiple Revisions to a Course – MATH 432, Intermediate Analysis II
 - 5. Revise Course Credit Hours – MATH 498, Senior Seminar
 - 6. Revise a Program – 728 and 528, Major in Mathematics

- III. Other Business

**CANDIDATES COMPLETING REQUIREMENTS FOR ADMISSION TO
PROFESSIONAL EDUCATION UNIT**

February 9, 2011 – March 16, 2011

Elementary P-5

Brigance, Meghan
Cox, Candace
Curtsinger, Ashley
Embry, Kayleigh
Findley, Michellian
Harrod, Emily M.
Hatcher, Kayla
Lang, Cristena
Logsdon, Melinda
Madden, Brittany
Mills, Sarah

Middle Grades

Hack, Kayla Math

5-12

Meador, Allie Business and Marketing
Ponder, Jamie FCS

P-12

Albany, Kacy Music
Barnett, Talor E. Music
Blair, Joseph PE
Knowles, Amanda Music
Peters, Philip A. PE
Seabolt, Dustin Music
Stillwell, Christine Music
Yates, Brittany Music

Secondary

IECE

Masters

McCoy, Amy	EXED
Morgan, Anthony	Physics
Surdyka, Kyla	EXED

EdS

If there are any questions or concerns about the status of any candidate, the person with the question or concern should contact Dr. Fred Carter, Teacher Services (745-4611 or fred.carter@wku.edu) prior to the PEC meeting.

Proposal Date: 1/27/2011

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

Contact Person: Brent Oglesbee, brent.oglesbee@wku.edu, 745-6566

1. Identification of program:

- 1.1 Current program reference number: 509
- 1.2 Current program title: Bachelor of Arts, Visual Studies
- 1.3 Credit hours:
 - BA Visual Studies, Studio Concentration - 49 semester hours
 - BA Visual Studies, Art Education Concentration – 66 semester hours

2. Identification of the proposed program changes:

- Deletion of art history electives, ART 300, 301, 302, 303
- Revised listing of upper level art history electives to include: ART 305, 315, 316, 408, 409, 410
- Revision of the student teaching listing requirements for art education concentration from 10 hours total of SEC 490 to 10 hours total selected from two of the following: ELED 490 (5 hours), MGE 490 (5 hours), or SEC 490 (5 hours).

3. Detailed program description:

BA Visual Studies, studio track	Hrs.	Proposed BA Visual Studies, studio track	Hrs.
ART 130 Design	3	ART 130 Design	3
ART 131 3-D Design	3	ART 131 3-D Design	3
ART 140 Drawing	3	ART 140 Drawing	3
ART 105 History of Art to 1300	3	ART 105 History of Art to 1300	3
ART 106 History of Art since 1300	3	ART 106 History of Art since 1300	3
2 upper-level elective art history courses ART 300, 301, 302, 303, 312, 313, 314, 325, 334, 390, 401, 403, 405, 407, 445, 494, PHIL 305	6	2 upper-level elective art history courses ART 305, 312, 313, 314, 315, 316, 325, 334, 390, 401, 403, 405, 407, 408, 409, 410, 445, 494, PHIL 305	6
Any three of the following basic studios	9	Any three of the following basic studios	9
ART 220 Ceramics		ART 220 Ceramics	
ART 231 Graphic Design		ART 231 Graphic Design	
ART 240 Drawing		ART 240 Drawing	
ART 243 Digital Media		ART 243 Digital Media	
ART 250 Printmaking		ART 250 Printmaking	
ART 260 Painting		ART 260 Painting	
ART 270 Sculpture		ART 270 Sculpture	
ART 280 Weaving		ART 280 Weaving	
2 upper-level elective studio courses	6	2 upper-level elective studio courses	6

3 upper-level studio courses in one medium	9	3 upper-level studio courses in one medium	9
ART 432 Portfolio	3	ART 432 Portfolio	3
ART 434 Capstone Seminar	1	ART 434 Capstone Seminar	1
Total semester hours	49	Total semester hours	49

BA Visual Studies, Art Ed. concentration	Hrs.	BA Visual Studies, Art Ed. concentration (proposed)	Hrs.
ART 130 Design	3	ART 130 Design	3
ART 131 3-D Design	3	ART 131 3-D Design	3
ART 140 Drawing	3	ART 140 Drawing	3
ART 105 History of Art to 1300	3	ART 105 History of Art to 1300	3
ART 106 History of Art since 1300	3	ART 106 History of Art since 1300	3
ART 325 Art of Asia, Africa, Americas	3	ART 325 Art of Asia, Africa, Americas	3
1 upper level art history elective ART 300, 301, 302, 303, 312, 313, 314, 334, 390, 401, 403, 405, 407, 445, 494, PHIL 305	3	1 upper level art history elective ART 305 , 312, 313, 314, 315, 316 , 334, 390, 401, 403, 405, 407, 408, 409, 410 , 445, 494, PHIL 305	3
ART 240	3	ART 240	3
ART 340	3	ART 340	3
Choose six of the following basic studios	18	Choose six of the following basic studios	18
ART 220 Ceramics		ART 220 Ceramics	
ART 231 Graphic Design		ART 231 Graphic Design	
ART 243 Digital Media		ART 243 Digital Media	
ART 250 Printmaking		ART 250 Printmaking	
ART 260 Painting		ART 260 Painting	
ART 270 Sculpture		ART 270 Sculpture	
ART 280 Weaving		ART 280 Weaving	
3 upper level studio elective courses	9	3 upper level studio elective courses	9
ART 311 Found. of Art Ed. & Methods I	3	ART 311 Found. of Art Ed. & Methods I	3
ART 411 Found. of Art Ed. & Methods II	3	ART 411 Found. of Art Ed. & Methods II	3
ART 413 Found. of Art Ed. & Methods III	3	ART 413 Found. of Art Ed. & Methods III	3
ART 490	3	ART 490	3
EDU 250	3	EDU 250	3
PSY 310	3	PSY 310	3
EXED 330	3	EXED 330	3
EDU 489	3	EDU 489	3
SEC 490	10	Choose two of three, 5 hours each for a total of 10 hours: SEC 490, ELED 490, MGE 490	
Total semester hours	88	Total semester hours	88

4. Rationale for the proposed program change:

- Newly approved art history courses cover the topics found in ART 300, 301, 302, 303, making these courses unnecessary for our majors.

- The department has had a series of art history courses individually approved but neglected to revise the program concentrations they were intended to serve. This action will ensure students in both Studio and Art Education Concentrations see all the upper level art history electives available to them via the iCAP audit system.
- Art Education majors have been assigned to two of the three student teaching courses, SEC 490, ELED 490, or MGE 490 for a total of 10 hours. Currently iCAP recognizes 10 hours of SEC 490 only as appropriate.

5. Proposed term for implementation and special provisions: Fall 2011

6. Dates of prior committee approvals:

Art Department/Division: 1/31/2011

Potter College Curriculum Committee 3/03/2011

Professional Education Council (if applicable)

Undergraduate Curriculum Committee

University Senate

Attachment: Program Inventory Form

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

Contact Person: Robyn Swanson, Department of Music
E-mail Address: robyn.swanson@wku.edu; Phone: 745-5925

1. Identification of program:

- 1.1 Current program reference number: 0439
- 1.2 Current program title: MAE in Music Education for Teacher Leaders
- 1.3 Credit hours: 30-37 hrs.

2. Identification of the proposed program changes:

The Master of Music Degree Program will have four concentrations:

- 1. Music Education,
 - 2. Conducting for teacher licensure rank change,
 - 3. Conducting for non-teacher licensure rank change, or
 - 4. Pedagogy
- New courses to the program are in bold: MUS 625, MUS 519, MUS 520

3. Detailed program description:

Program Description (Current)	Program Description (Proposed)
	<p>1. The Master of Music graduate program has four areas of concentration: Music Education, Conducting for teacher licensure rank change, Conducting for non- teacher licensure rank change or Pedagogy. These provide continued development of (1) individual students which will result in enrichment of their personal lives and will enable them to preserve and extend cultural and diverse heritages; and (2) professional and scholarly competence in organization, interpretation, evaluation, communication, and dissemination of knowledge in the discipline.</p> <p>The music education and conducting (teacher licensure rank change option) concentrations would further enable the teacher/practitioner to meet certification renewal requirements and rank changes mandated by the Commonwealth of Kentucky. Graduates in the pedagogy specialization would meet requirements for</p>

	national certification through the Music Teachers National Association (MTNA).
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Current Program	Proposed Program										
<p>Admission Requirements: (Criteria vary, depending on the student's undergraduate institution and GPA):</p> <ol style="list-style-type: none"> 1. No GRE qualifying score will be required for applicants who are graduates of a WKU teacher preparation program, as long as they have or are eligible for a teaching certificate. A copy of the certificate or statement of eligibility must be submitted with the application. 2. Applicants who have undergraduate degrees from all other accredited universities will be admitted without a qualifying GRE score if they have a minimum 2.75 GPA for all previous coursework (undergraduate and graduate) and have or are eligible for a teaching certificate. A copy of the certificate or statement of eligibility must be submitted with the application. 3. Applicants with undergraduate degrees from all other accredited universities with a GPA lower than 2.75 (undergraduate and graduate) must achieve a GAP (GRE score multiplied by the undergraduate GPA) score of 2200 or higher and a GRE Analytical Writing score of 3.5 or higher and have or be eligible for a teaching certificate for elementary education. A copy of the certificate or statement of eligibility must be submitted with the application. <p>*Applicants whose certificates have expired may be admitted, but they may enroll for only six hours before they must apply to the EPSB for re-issued certificates. After completion of six hours, a student admitted with an expired certificate must submit a</p>	<p><u>Admission Requirements:</u></p> <p><i>University Admission Requirements:</i></p> <ol style="list-style-type: none"> 1. Baccalaureate degree in music 2. Applicants who are alumni of WKU teacher preparation programs seeking the music education and conducting teacher licensure rank-change concentrations must submit a current, valid teaching certificate or Statement of Eligibility for P-12 Music Certification (Integrated, or Vocal, or Choral). 3. Candidates who are alumni of WKU baccalaureate music degree programs seeking non-teacher licensure rank-change concentrations (conducting and pedagogy) must submit an application. 4. Applicants who have undergraduate degrees from all other accredited universities will be admitted without a qualifying GRE score if they have a minimum 2.75 GPA for all previous coursework (undergraduate and graduate) and if required for the concentration, have or are eligible for a teaching certificate. A copy of the certificate or statement of eligibility must be submitted with the application if applicable. <p><i>Department of Music Admission Requirements:</i></p> <ol style="list-style-type: none"> 1) Prior to entrance: Audition on primary instrument or voice 2) Prior to completion of 9-12 graduate hours: students are required to take placement exams in music theory and music history <p>Music Core: Required for all 3 concentrations:12 hrs.</p> <p>(Level 2 content core for the music education/conducting teacher licensure rank change programs).</p> <table style="width: 100%; border: none;"> <tr> <td>MUS 500: Theory</td> <td style="text-align: right;">3 hours</td> </tr> <tr> <td>MUS 530: Music Literature</td> <td style="text-align: right;">3 hours</td> </tr> <tr> <td>MUS 511: Research Methods in Music</td> <td style="text-align: right;">3 hours</td> </tr> <tr> <td>Or TCHL 560: Action Research for Teacher Leaders</td> <td></td> </tr> <tr> <td>MUS 525: Music and Human Experience</td> <td style="text-align: right;">3 hours</td> </tr> </table>	MUS 500: Theory	3 hours	MUS 530: Music Literature	3 hours	MUS 511: Research Methods in Music	3 hours	Or TCHL 560: Action Research for Teacher Leaders		MUS 525: Music and Human Experience	3 hours
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MUS 530: Music Literature	3 hours										
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Or TCHL 560: Action Research for Teacher Leaders											
MUS 525: Music and Human Experience	3 hours										

<p>copy of the re-issued certificate before being allowed to register for any additional courses.</p> <p><u>(Level 1) Professional Education Core—12-19 hours</u> TCHL 500 – Foundations of Teacher Leadership (3 hrs.) MUS 509- Music Curriculum in the Elementary and Middle Schools (3 hrs.) MUS 514 – Secondary Music Curriculum (3 hrs.) TCHL 540 – Classroom Instruction: Instructional Strategies (1 hour) TCHL 544 – Classroom Instruction: Equitable School and Community Partnerships (1 hour) TCHL 548 – Classroom Instruction: Managing the Learning Environment (1 hour) TCHL 550 – Student Assessment I: Fundamentals of Student Assessment (1 hour) TCHL 554 – Student Assessment II: Standardized Testing (1 hour) TCHL 558 – Student Assessment III: Classroom Tests and Instruments (2 hours) MUS 511: Investigations in Music Education or TCHL 560 – Action Research for Teacher Leaders (3 hours) Courses in boldface are required.</p> <p><u>(Level 2) Specialization Component—18 hours</u> Advisor-approved elective courses selected from discipline in which student is certified. Music Core Content 12 hrs from: MUS 500 - Seminar in Theory 3 hrs MUS 518 - Advanced Conducting 3 hrs MUS 525 - Music and Human Experience 3 hrs MUS 530 - Music Literature 3 hrs MUS 538- Directed Ind. Study (Music) 3 hrs MUS 553 - Applied Principal</p>	<p>1. Music Education Teacher Licensure Rank-Change Concentration: 12-19 hrs.</p> <p>(Level 1) Professional Music Education Core Required music education courses (9 hours)</p> <p>MUS 509- Music Curriculum in the Elementary and Middle Schools (3 hours) MUS 514 – Secondary Music Curriculum (3 hours) MUS 625: Music Education Capstone Project (To be completed as an exit requirement.) (3 hours)</p> <p>Professional Education Courses 3-10 hours *TCHL 500 – Foundations of Teacher Leadership (3 hours) Based on student assessment, the outcomes of TCHL 500 and advisor recommendation, the following courses may be required. <i>TCHL 540 – Classroom Instruction: Instructional Strategies (1 hour)</i> <i>TCHL 544 – Classroom Instruction: Equitable School and Community Partnerships (1 hour)</i> <i>TCHL 548 – Classroom Instruction: Managing the Learning Environment (1 hour)</i> <i>TCHL 550 – Student Assessment I: Fundamentals of Student Assessment (1 hour)</i> <i>TCHL 554 – Student Assessment II: Standardized Testing (1 hour)</i> <i>TCHL 558 – Student Assessment III: Classroom Tests and Instruments (2 hours)</i> *(Required the first semester of admission to the program.)</p> <p>Elective Hours: (6) Elective hours must be music courses selected from the other graduate offerings: workshops, ensembles, lessons, independent studies etc. A 3-hour MUS 512 workshop is required for the music education concentration and MUS 519: Conducting Seminar is required for the conducting concentration.</p> <p>2. Conducting Teacher Licensure Rank-Change Concentration: 12-19 hrs. (Level 1) Professional Music Education Core Required music education courses (9 hours)</p>
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<p>2 hrs MUS 550 -Applied Music Secondary 1 hr. Performing Ensembles: Select 1 hr. from the following MUS 540,541,544,545,547,548,549,571,574 <u>Music Education : 6 hrs.</u> Elected from the following: MUS 512* - Workshop (1-3 hours with a maximum of 6) MUS 513* - Directed Independent Study</p> <p>3 hrs Applicable courses from the music core: MUS 553, - Applied Principal</p> <p>2 hrs Performing Ensembles : Select 1 hr. from the following MUS 540,541,544,545,547,548,549,571,574 *a maximum of 6 hours may be used from any combination of MUS 512 and MUS 513: 3 credit hours of MUS 512 is required.</p> <p>Program Completion Requirements: Candidates must successfully complete MUS 511-Investigations in Music Education or TCHL 560 – Action Research for Teacher Leaders (Course Grade of C or higher) and present research results in a venue approved by advisor</p>	<p>MUS 518: Conducting (3 hours) Either MUS 509- Music Curriculum in the Elementary and Middle Schools (3 hours) or MUS 514 – Secondary Music Curriculum (3 hours) MUS 625: Capstone Project either Conducting or the Music Education (To be completed as an exit requirement.) (3 hours)</p> <p>Professional Education Courses 3-10 hours TCHL 500 – Foundations of Teacher Leadership (3 hours) Based on student assessment, the outcomes of TCHL 500 and advisor recommendation, the following courses may be required. <i>TCHL 540 – Classroom Instruction: Instructional Strategies (1 hour)</i> <i>TCHL 544 – Classroom Instruction: Equitable School and Community Partnerships (1 hour)</i> <i>TCHL 548 – Classroom Instruction: Managing the Learning Environment (1 hour)</i> <i>TCHL 550 – Student Assessment I: Fundamentals of Student Assessment (1 hour)</i> <i>TCHL 554 – Student Assessment II: Standardized Testing (1 hour)</i> <i>TCHL 558 – Student Assessment III: Classroom Tests and Instruments (2 hours)</i> *(Required the first semester of admission to the program.)</p> <p>Elective Hours: (6) Elective hours must be music courses selected from the other graduate offerings: workshops, ensembles, lessons, independent studies etc. A 3-hours MUS 512 workshop is required for the music education concentration and MUS 519: Conducting Seminar is required for the conducting concentration. MUS 519 may be taken for a total of 6 hours. Total teacher licensure rank change program hours: 30-37</p> <p>3. Conducting for non-teacher licensure rank change concentration: 12hrs.</p> <table border="0"> <tr> <td>MUS 518: Advanced Conducting</td> <td>3 hours</td> </tr> <tr> <td>MUS 519: Conducting Seminar</td> <td>3-6 hours</td> </tr> <tr> <td>Ensemble</td> <td>1 hour</td> </tr> <tr> <td>Applied Lessons In conducting</td> <td>2 hours</td> </tr> <tr> <td>MUS 625: Capstone Project</td> <td>3 hours</td> </tr> </table>	MUS 518: Advanced Conducting	3 hours	MUS 519: Conducting Seminar	3-6 hours	Ensemble	1 hour	Applied Lessons In conducting	2 hours	MUS 625: Capstone Project	3 hours
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MUS 519: Conducting Seminar	3-6 hours										
Ensemble	1 hour										
Applied Lessons In conducting	2 hours										
MUS 625: Capstone Project	3 hours										

	<p>Elective Hours: (6) Elective hours must be music courses selected from the other graduate offerings: workshops, ensembles, lessons, independent studies etc. MUS 519 may be taken for a total of 6 hours. Total Program hours: 30 hrs.</p> <p>4. Pedagogy Concentration: 12 hrs. (Leads to MTNA National Certification)</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 80%;">MUS 520: Advanced Pedagogy</td> <td style="text-align: right;">3 hours</td> </tr> <tr> <td>MUS 513: DIS in Pedagogy</td> <td style="text-align: right;">3 hours</td> </tr> <tr> <td>Ensemble</td> <td style="text-align: right;">1 hour</td> </tr> <tr> <td>Applied Lessons</td> <td style="text-align: right;">2 hours</td> </tr> <tr> <td>MUS 625: Capstone Project</td> <td style="text-align: right;">3 hours</td> </tr> </table> <p>Elective Hours: (6) Elective hours must be music courses selected from the other graduate offerings: workshops, ensembles, lessons, independent studies etc. Total Program hours: 30 hrs.</p> <p><u>Program Exit Requirements:</u></p> <ol style="list-style-type: none"> 1. Comprehensive Capstone MM Project: MUS 625 Conducting: Conducting project and program notes Music Education: Action Research Project Pedagogy: Lecture recital and corresponding research paper 2. Oral comprehensive exam A comprehensive approach to problem solving in the discipline of music, which includes historical, analytical and pedagogical applications. 	MUS 520: Advanced Pedagogy	3 hours	MUS 513: DIS in Pedagogy	3 hours	Ensemble	1 hour	Applied Lessons	2 hours	MUS 625: Capstone Project	3 hours
MUS 520: Advanced Pedagogy	3 hours										
MUS 513: DIS in Pedagogy	3 hours										
Ensemble	1 hour										
Applied Lessons	2 hours										
MUS 625: Capstone Project	3 hours										

4. Rationale for the proposed program change: Currently, the only graduate-level degree program that is offered by the department is the MAE in Music Education for Teacher Leaders (0439). It is common for a Department of Music with the current enrollment numbers (201 students: 181 undergraduate, 20 graduate) to offer a Master of Music degree with multiple areas of concentration. Since 2001, the enrollment in the baccalaureate music programs (Bachelor of Music Education, Bachelor of Music in Performance and Bachelor of Arts in Music) has increased 21.8%. The average ACT composite scores have increased from 22.2 to 24 and the number of graduate and undergraduate degrees awarded has increased from 26 to 45.

The WKU Department of Music has an established reputation for preparing quality music educators. Most music educators within the region earn the MAE, Rank II non-degree and Rank I (Music) programs at WKU. According to the Kentucky Education Professional Standards Board, changes in teacher licensure for music education can be acquired through a Master of Music Degree. Currently, the Department of Music has qualified and internationally recognized faculty to teach the required courses in each concentration of the degree program.

5. Proposed term for implementation and special provisions (if applicable): Fall 2011
(Implementation date is flexible depending on accreditation agency approval.)

6. Dates of prior committee approvals:

Department of Music Graduate Faculty: 1-24-11

PCAL Curriculum Committee 3-3-11

Professional Education Council

Graduate Council

University Senate

Attachment: Program Inventory Form

**Potter College Arts and Letters
Department of Music
Proposal to Create a New Academic Degree Type
(Action Item)**

Contact Person: Robyn Swanson, robyn.swanson@wku.edu, 745-5925

1 Identification of Academic Degree Type:

- 1.1 Academic degree type name: Master of Music
- 1.2 Standard degree type abbreviation: MM
- 1.3 Catalog description of academic degree type:
The Master of Music graduate program will have four areas of concentration:
 1. Music Education,
 2. Conducting for teacher licensure rank change,
 3. Conducting for non-teacher licensure rank change, and
 4. Pedagogy.

These provide continued development of (1) individual students which will result in enrichment of their personal lives and will enable them to preserve and extend cultural and diverse heritages; and (2) professional and scholarly competence in organization, interpretation, evaluation, communication, and dissemination of knowledge in the discipline.

The music education and conducting for teacher licensure rank change option concentrations would further enable the teacher/practitioner to meet certification renewal requirements and rank changes mandated by the Commonwealth of Kentucky. Graduates in the pedagogy specialization would meet requirements for national certification through the Music Teachers National Association (MTNA).

2 Rationale:

- 2.1 Reason for developing the proposed academic degree type:
Currently, the only graduate-level degree program that is offered by the department is the Master of Arts in Education in Music Education Teacher Leader (0439). It is common for a Department of Music with the current enrollment numbers (201 students: 181 undergraduate, 20 graduate) to offer a Master of Music degree with multiple areas of concentration. Since 2001, the enrollment in the baccalaureate music programs (Bachelor of Music Education, Bachelor of Music in Performance and Bachelor of Arts in Music) has increased 21.8%. The average ACT composite scores have increased from 22.2 to 24 and the number of graduate and undergraduate degrees awarded has increased from 26 to 45.

The WKU Department of Music has an established reputation for preparing quality music educators. Most music educators within the region earn the MAE, Rank II non-degree and Rank I (Music) programs at WKU. According to the Kentucky Education Professional Standards Board, changes in teacher licensure

for music education can be acquired through a Master of Music Degree that includes the Teacher Leader requirements. Currently, the Department of Music has qualified and internationally recognized faculty to teach the required courses in each concentration of the degree program.

- 2.2 Document need for academic degree type for professional certification, program accreditation, licensure, career advancement, and/or higher education in the academic field:

Recent WKU alumni have inquired why we do not offer a MM degree with concentrations in conducting, music education and pedagogy. Several of the WKU undergraduate students seek graduate study in conducting and pedagogy at other universities because currently it is unavailable at WKU. In 2009-2010, graduate-level music education faculty surveyed 104 undergraduate students about a MM being offered at WKU with the specialization areas in conducting and music education. Of the 104 students, 97 indicated they are interested (yes and maybe) in pursuing a Master of Music in conducting or music education at WKU. Twenty-three undergraduate students were surveyed regarding a MM in pedagogy in which 22 students indicated they would pursue the MM in pedagogy at WKU.

- 2.3 List other universities in Kentucky and in other states (including programs at benchmark institutions) offering this academic degree type:

Kentucky universities that offer MM degree programs with these areas of specialization include University of Kentucky, University of Louisville, Eastern Kentucky University and Murray State University. Our current CIP code for the MAE is 13.1312. The CIP code for the listed Kentucky universities is the same.

KY Programs	Degree KY	Benchmark Institutions	Degree: Benchmark Institutions
U K	MM (Music Teacher)	Florida State Univ	MM
UL	MME/MAT	University of Indiana	MM
EKU	MME	Eastern Michigan U	MM
MSU	MME	Arizona State Univ	MM
Private KY Programs		Arkansas State Univ	MM
Campbellsville Univ	MM	Northwestern Univ	MM
Asbury College	MM	Univ of Tennessee	MM

- 2.4 Evidence that this academic degree type is recognized by relevant professional organization(s), regional accreditor(s), and/or the Department of Education:

The WKU Department of Music is fully accredited by the National Association of Schools of Music (NASM). The proposed MM degree program with the 4 areas of concentrations aligns with the learned society guidelines. The Kentucky EPSB and NCATE comply with NASM standards for teacher certification. The Master

of Music (MM) Degree Program is the preferred graduate program title by NASM. Numerous music specializations are NASM accredited and it is a common practice by college/universities worldwide to have a MM degree with music education, conducting and pedagogy as a professional education emphasis.

2.5 Relationship of the proposed degree type to other academic degree types now offered by the university:
 Due to KY EPSB regulations, the existing MAE/Music Major Degree Program (089) was deleted in January of 2011 and students may no longer gain admission to this program. The Master of Arts in Education Teacher Leader Music Program (MAETL/Music-0439) replaced the (089) program. All music education components of the MAETL/Music will remain the same within the MM/Music Education/Conducting (rank change) concentrations.
 Currently, the Department of Music has the Bachelor of Music Degree with two areas of specialization: music education and performance.

2.6 Current WKU major(s) qualifying for this degree type:
 Music

2.7 Projected number of annual graduates in the proposed degree type:
 15-20 annually

3. Proposed term for implementation: Fall 2011
 (Implementation date is flexible depending on accreditation agency approval.)

4. Dates of prior committee approvals:

Music Department Graduate Faculty:	1-24-11
PCAL Curriculum Committee	3-3-11
Professional Education Council	_____
Graduate Council	_____
Consultation with CPE through Provost's Office	_____
University Senate	_____
Board of Regents	_____

Attachment: Degree Inventory Form

Proposal Date: 12/15/2010

College of Education and Behavioral Sciences
School of Teacher Education
Proposal to Create a New Course
(Action Item)

Contact Person: Barbara Fiehn, Barbara.fiehn@wku.edu, 270.745.6552

1. Identification of proposed course:

- 1.1 Course prefix and number: LME 592
- 1.2 Course title: Internship in Library Media Education
- 1.3 Abbreviated course title: Internship in LME
- 1.4 Credit hours/contact hours: 3.0
- 1.5 Type of course: I
- 1.6 Prerequisite: Permission of the instructor; completion of 24 hours of course work including LME 501, 512, 535, and 537; admission to candidacy and admitted to professional education
- 1.7 Course catalog listing: Field based experience in an appropriate setting under supervision of a certified library media specialist. For students seeking initial Kentucky teaching certification at the graduate level.

2. Rationale:

- 2.1 Reason for developing the proposed course:
Students who seek school library certification but do not have prior teaching certification must complete 360 field experience hours—the same number of hours of student teaching as undergraduate student teachers. The current LME 590 course requires only a 120-hour practicum experience. The proposed LME 592 course will allow the LME faculty to better meet the needs of initial certification students and provide 360 field experience hours.
- 2.2 Projected enrollment in the proposed course:
Based on past enrollments of students seeking initial certification via the LME Master's degree, we expect approximately 5 students per academic year.
- 2.3 Relationship of the proposed course to courses now offered by the department:

This course will most closely resemble LME 590; however, the course design will allow for an extended experience in the field meeting the requirements of the Commonwealth of Kentucky for a 360-hour field experience and provide a stronger focus on instruction and student management in addition to the requirements existing in LME 590. While Exceptional Education (EXED 590), Interdisciplinary Early Childhood Education (IECE 524), Literacy (LTCY 695), and Middle Grades Education (EDU 590) are practicum courses at the graduate level, they are specific to a professional area, and none requires 360 hours of field experience.

2.4 Relationship of the proposed course to courses offered in other departments:
Programs in Educational Administration and Leadership (EDAD 598), Counseling and Student Affairs (CNS 590, CNS 591), Psychology (PSY 662), and many other disciplines offer practicum courses specific to a professional area. However, these courses do not provide an option for the initial certification of Library Media Education students and do not require 360 hours of field experience.

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

Murray State University (LIB 621), and Eastern Kentucky University (LIB 870) offer practicum courses for students in Library Media Education graduate degree or Rank I programs, but not as part of initial certification at the master's degree level and do not include 360 hours of field experience required by the Commonwealth of Kentucky for initial certification.

3. Discussion of proposed course:

3.1 Course objectives:

At the conclusion of the course, students will be able to

- Apply knowledge and skills in library media education to experiences in a supervised Internship setting,
- Demonstrate teaching and student management competencies expected of a beginning teacher,
- Plan and carry out activities in each of the five standards areas of the American Association of School Librarians standards (AASL).
- Apply knowledge of the Library Media Education field to create a plan for professional growth,
- Reflect on and provide evidence of planned personal and professional growth as a result of participating in practicum activities and LME course work,
- Use technology to create a professional portfolio CD

3.2 Content outline:

For the capstone portion of the course

1. Overview of the Internship Experience
 - Expectations of Internship activities
 - Expectations of cooperating media specialists
 - Completion of required forms and field reflections
2. Overview of the Portfolio Planning Guide and Portfolio Process
 - Overview of Portfolio Process and Concept of Reflective Practice
 - Review of AASL Professional Standards
 - Review of Portfolio Planning Guide Instructions
 - Review of Portfolio Instructions and Rubric
3. Overview of Strategies for Creating the Professional Portfolio
 - Overview of Portfolio Requirements and Rubric

Connecting AASL standards with Portfolio Planning Guide
Guidance in Reflective Writing
Overview of technical considerations in portfolio development

3.3 Student expectations and requirements:

- Complete and pass LME Internship assignments
 - Document a minimum of 360 hours of Internship activity
 - Document completion of a minimum of two activities that correlate with each substandard of the five AASL program standards
 - Media Center Evaluation Project
 - Two progress and activity reflections
- Complete and pass capstone portfolio

3.4 Tentative texts and course materials:

American Association of School Librarians. (2009). *Empowering learners: Guidelines for school library media programs*. Chicago, IL: American Association of School Librarians.

American Library Association. (2009). *Intellectual freedom statements and policies*.

Retrieved from

<http://www.ala.org/ala/aboutala/offices/oif/statementspols/statementspolicies.cfm>

American Association of School Librarians (2009). *Position statements*. Retrieved from <http://www.ala.org/ala/mgrps/divs/aasl/aaslissues/positionstatements/positionstatements.cfm>

Callison, D. (2009). Instructional trends from AASL journals: 1972-2007--part 2: From library-focused to information-focused. *School Library Media Activities Monthly*, 25(9), 22-26.

Callison, D. (2009). Instructional trends from AASL journals: 1972-2007--part 3: From access-measured to evaluation-measured. *School Library Media Activities Monthly*, 25(10), 25-28.

Erikson, R. & Markuson, C. (2009). *Designing a school library media center for the future*. (2nd Ed.). Chicago: ALA Editions.

Wiggins, G., & McTighe, J. (2008). Put understanding first. *Educational Leadership*, 65(8), 36-41.

Zmuda, A., & Harada, V. (2008). Reframing the library media specialist as a learning specialist. *School Library Media Activities Monthly*, 24(8), 42-47.

4. Resources:

4.1 Library resources: No new additional resources required

4.2 Computer resources: No new additional resources required

5. Budget implications:

5.1 Proposed method of staffing:

Existing Staffing

5.2 Special equipment needed:

None Needed

5.3 Expendable materials needed:

None Needed

5.4 Laboratory materials needed:

None needed

6. Proposed term for implementation: Fall 2011

7. Dates of prior committee approvals:

School of Teacher Education: _____12/15/10_____

CEBS Curriculum Committee: _____3/1/2011_____

Professional Education Council: _____

Graduate Council: _____

University Senate: _____

Attachments: Course Inventory Form, Library Resources Form

**College of Education and Behavioral Sciences
School of Teacher Education
Proposal to Revise A Program
(Action Item)**

Contact Person: Barbara Fiehn, Barbara.fiehn@wku.edu, 270.745.6552

1. Identification of program:

- 1.1 Current program reference number: 083
- 1.2 Current program title: Library Media Education
- 1.3 Credit hours: 30 (plus research tool)

2. Identification of the proposed program changes:

- Add LME 592 Internship in Library Media Education for initial teaching certification
- Clarify language in program description
- Delete section *Program Requirements for Teachers Already Certified as Library Media Specialists*
- Add a literature course to the professional specialization requirements in the LME concentration.

3. Detailed program description:

Current program	Proposed program
<p>The Master of Science with a major in LME is a dual concentration program in information services (LMS) and educational technology (EDTECH). It prepares persons for service as library media specialists, training development specialists, educational technology specialists, and information service specialists in schools, colleges, public libraries, and private organizations.</p> <p>Program Description: The Master of Science degree is a 30-33 hour program. A fifteen-hour core of courses is required plus a 3-hour research tool.</p> <p>Students who seek teacher certification in the school library media or educational technology must follow the requirements for teacher certification. Both may be used for the Kentucky</p>	<p>The Master of Science with a major in LME is a dual concentration program in information services (LMS) and educational technology (EDTECH). It prepares persons for service as library media specialists, training development specialists, educational technology specialists, and information service specialists in schools, colleges, public libraries, and private organizations.</p> <p>Program Description: The Master of Science degree is a 30-33 hour program. A fifteen-hour core of courses is required plus a research tool.</p> <p>Students who seek teacher certification in school library media or educational technology must follow the requirements for teacher certification. Both may be used for the Kentucky Rank II or Rank I salary levels.</p>

Rank II or Rank I salary levels.

Library Media Specialist Concentration: The LMS concentration prepares professionals for work in information service organizations like public libraries, library media centers in P-12 schools, and positions as library assistants in college and university libraries. A program of study in information services can be planned to meet the certification requirements for school library media specialists in Kentucky and other states. It also meets the Kentucky Department of Library and Archives requirements for certification for the Professional Certificate II for public librarians.

Requirements for the MS Degree in LME LMS Concentration: The Master of Science in Library Media Education LMS Concentration requires a minimum of 30 semester hours of core courses, professional specialization courses, and a research course/tool for a total of 33 hours. Eighteen hours of Library Media Education coursework is required with 15-hours in core courses. Courses on a student's approved program of study must be completed within a period of six years from the date of enrollment in the first course(s).

Master of Science Core Courses: Fifteen semester hours are specified core courses:

LME 501 Program Organization and Administration
LME 512 Issues in Library Media Education
LME 535 Survey of Educational Technology Practices (Note: Prerequisite for LME 537)
LME 537 Principles of Educational Technology Applications (Not regularly offered in the summer. Prerequisite: Completion of LME 535.)
LME 590 Practicum (Note: Permission of the instructor; completion of 24 hours of course work including LME 501, 512, 535, and 537; and admission to candidacy. Students who do not hold teacher certification must be admitted to WKU Teacher Education)

Research Tool: The research tool requirement is met by successful completion (grade A or B) of EDFN 500-Research Methods, LME 519 Research in LME, EXED 534 Research in Exceptional Education, or an equivalent.

Library Media Specialist Concentration: The LMS concentration prepares professionals for work in information service organizations like public libraries, library media centers in P-12 schools, and positions as library assistants in college and university libraries. A program of study in information services can be planned to meet the certification requirements for school library media specialists in Kentucky and other states. It also meets the Kentucky Department of Library and Archives requirements for certification for the Professional Certificate II for public librarians.

Requirements for the MS Degree in LME LMS Concentration: The Master of Science in Library Media Education LMS Concentration requires a minimum of 30 semester hours of core courses, professional specialization courses, and a research course/tool for a total of 30-33 hours. Eighteen hours of Library Media Education coursework is required with 15-hours in core courses. Courses on a student's approved program of study must be completed within a period of six years from the date of enrollment in the first course(s).

Master of Science Core Courses: Fifteen semester hours are specified core courses:

LME 501 Program Organization and Administration (**3 hours**)
LME 512 Issues in Library Media Education (**3 hours**)
LME 535 Survey of Educational Technology Practices (**3 hours**) (Note: Prerequisite for LME 537)
LME 537 Principles of Educational Technology Applications (**3 hours**) (Prerequisite: Completion of LME 535.)
LME 590 Practicum (**3 hours**) (**for students with prior Kentucky teaching certification**) **OR** LME 592 Internship in LME (**3 hours**) (**for students without prior Kentucky teaching certification.**)
(**Prerequisites for LME 590 and LME 592:** Permission of the instructor; completion of 24 hours of course work including LME 501, 512, 535, and 537; admission to candidacy; **and admission to professional education.**)

Research Tool: The research tool requirement is

<p>LME 590 Practicum: The LME 590 Practicum course is the capstone experience required for completion of the degree program.</p> <p>Transfer Credit: No more than 12 hours of previous graduate coursework, whether transferred from another institution or from a previous master's degree from WKU (or a combination of the two), or as a non-degree seeking student at WKU can be used to fulfill program and research tool requirements. Transferred courses cannot be older than 6 years by the time the requirements for the degree are completed. Transfer credit cannot be used in place of LME 537 Principles of Educational Technology Applications because it requires development and implementation of an instructional design project that is a foundational component of the LME 590 Practicum.</p> <p>Library Media Specialist Certification: In addition to completion of the 15-hour core and the research tool for the MS degree, the certification requirements for certification as a school library media specialist in most states and as a School Media Librarian P-12 in Kentucky include the following:</p> <p>Library Media Specialist Professional Specialization (9 hrs. required):</p> <p>LME 502 Collection Management LME 506 Classification and Cataloging LME 508 Information Sources and Services</p> <p>Elective Courses (Minimum of 6 sem. hrs.):</p> <p>LME 518 Advanced Children's Literature LME 527 Advanced Young Adult Literature</p> <p>(Other appropriate LME courses or courses outside of LME may be selected with the approval of the graduate advisor.)</p> <p>Certification Examination (PRAXIS II):</p> <p>While a certification examination is not a requirement for the Master of Science in LME, Kentucky does require a passing score on the PRAXIS II Subject Assessments-Library Media Specialist for certification as a school media librarian. Students outside of Kentucky are</p>	<p>met by successful completion (grade A or B) of EDFN 500-Research Methods, LME 519 Research in LME, EXED 534 Research in Exceptional Education, or advisor-approved equivalent.</p> <p>LME 590 Practicum: The LME 590 Practicum course is the capstone experience required for students with prior Kentucky teaching certification.</p> <p>LME 592 Internship in LME: The LME 592 Internship course is the capstone experience required for students without prior Kentucky teaching certification.</p> <p>Transfer Credit: No more than 12 hours of previous equivalent graduate coursework, whether transferred from another institution or from a previous master's degree from WKU (or a combination of the two), or as a non-degree seeking student at WKU may be used to fulfill program and research tool requirements. Transferred courses cannot be older than 6 years by the time the requirements for the degree are completed. Transfer credit cannot be used in place of LME 537 Principles of Educational Technology Applications because it requires development and implementation of an instructional design project that is a foundational component of the Practicum.</p> <p>Library Media Specialist Certification: In addition to completion of the 15-hour core and the research tool for the MS degree, the requirements for certification as a school library media specialist in most states and as a School Media Librarian P-12 in Kentucky include the following:</p> <p>Library Media Specialist Professional Specialization (12 hrs. required):</p> <p>LME 502 Collection Management (3 hours) LME 506 Classification and Cataloging (3 hours) LME 508 Information Sources and Services (3 hours) Select one of the following courses LME 518 Advanced Children's Literature (3 hours) OR LME 527 Advanced Young Adult Literature (3 hours)</p>
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responsible for determining the requirements for certification in their states.

Educational Technology Concentration: The Educational Technology Concentration prepares professionals who work with training and development specialists to incorporate technology into instruction/training, who serve as trainers of employees in the use of technology, and who are certified teachers that are educational technology specialists in P-12 settings. The Educational Technology Certificate is indicated on the university transcript and can be obtained by certified teachers and non-certified students. Certified teachers may obtain the Instructional Computer Technology Endorsement P-12 through the Educational Technology Concentration.

The Educational Technology Concentration of the Master of Science in Library Media Education prepares professionals who work with training and development specialists to incorporate technology into instruction or training, who serve as trainers of employees in the use of technology, or who are certified teachers who wish to be educational technology specialists in P-12 settings. Certified teachers may obtain the Instructional Computer Technology Endorsement P-12 through the Educational Technology Concentration. The Kentucky P-12 Instructional Computer Technology Endorsement requires a teaching certificate. Students in the Educational Technology Concentration who are not seeking certification may obtain the Educational Technology Certificate, which is listed on the university transcript.

Students in the Educational Technology Concentration must meet the requirements for the Master of Science in Library Media Education, including a minimum of 30 semester hours plus a research course/tool, for a total of 33 hours. Eighteen hours are required in Library Media Education courses with 15-hours in core courses. Courses on a student's approved program of study must be completed within a period of six years from the date of enrollment in the first course(s).

Core Courses: Fifteen semester hours are specified core courses:

LME 501 Program Organization and

Elective Courses (Minimum of **3 hrs.**): Appropriate LME courses or courses outside of LME may be selected with **advisor** approval.

Certification Examination (PRAXIS II):

While a certification examination is not a requirement for the Master of Science in LME, Kentucky does require a passing score on the PRAXIS II Subject Assessments-Library Media Specialist for certification as a school media librarian. Students outside of Kentucky are responsible for determining the requirements for certification in their states.

Educational Technology Concentration: The Educational Technology Concentration prepares professionals who work with training and development specialists to incorporate technology into instruction/training, who serve as trainers of employees in the use of technology, and who are certified teachers that are educational technology specialists in P-12 settings. Certified teachers may obtain the Instructional Computer Technology Endorsement P-12 through the Educational Technology Concentration.

The Educational Technology Concentration of the Master of Science in Library Media Education prepares professionals who work with training and development specialists to incorporate technology into instruction or training, who serve as trainers of employees in the use of technology, or who are certified teachers who wish to be educational technology specialists in P-12 settings. Certified teachers may obtain the Instructional Computer Technology Endorsement P-12 through the Educational Technology Concentration. The Kentucky P-12 Instructional Computer Technology Endorsement requires a teaching certificate. Students in the Educational Technology Concentration who are not seeking certification may obtain the Educational Technology Certificate, which is listed on the university transcript.

Students in the Educational Technology Concentration must meet the requirements for the Master of Science in Library Media Education, including a minimum of 30 semester hours plus a research tool. Eighteen hours are required in Library Media Education courses, **including** 15-

<p>Administration LME 512 Issues in Library Media Education LME 535 Survey of Educational Technology Practices (Note: Prerequisite for LME 537) LME 537 Principles of Educational Technology Applications (Not offered in the summer. Prerequisite: Completion of LME 535.) LME 590 Practicum (Note: Course Capstone requirement; Permission of the instructor; completion of 24 hours of course work including LME 501, 512, 535, and 537; and admission to candidacy.)</p> <p>Specialization: Fifteen semester hours are professional specialization courses: Select four of the following courses: LME 545 Educational Technology Production LME 547 Integration of Educational LME 550 Emerging Technology in Education (Prerequisite: LME 537) LME 737 Educational Technology Leadership LME 509 Investigations in Educational Technology and Select 3 hours of LME Advisor approved electives in educational technology, library media education, information science, etc.</p> <p>Research Tool A student completing the LME master's degree program with the Educational Technology Concentration also completes the Research Tool. The research tool requirement is met by successful completion (grade A or B) of EDFN 500-Research Methods, or LME 519 Research in LME, or EXED 534 Research in Exceptional Education, or an equivalent. Student with a previous master's degree may be able to transfer a previous research class if the class will not be more than six years old upon a student's graduation or complete a research competency exam to replace the research tool requirement.</p> <p>Transfer Credit: No more than 12 hours of previous graduate coursework, whether transferred from another institution or from a previous master's degree from WKU (or a combination of the two), or as a non-degree, seeking student at WKU can be used to fulfill program and research tool requirements. Transferred courses cannot be older than 6 years by the time the requirements for the</p>	<p>hours in core courses. Courses on a student's approved program of study must be completed within a period of six years from the date of enrollment in the first course(s).</p> <p>Core Courses: Fifteen semester hours are specified core courses:</p> <p>LME 501 Program Organization and Administration (3 hours) LME 512 Issues in Library Media Education (3 hours) LME 535 Survey of Educational Technology Practices (3 hours) (Prerequisite for LME 537) LME 537 Principles of Educational Technology Applications (3 hours) (Prerequisite: Completion of LME 535.) LME 590 Practicum (3 hours) (Prerequisites: Course Capstone requirement; Permission of the instructor; completion of 24 hours of course work including LME 501, 512, 535, and 537; and admission to candidacy.)</p> <p>Research Tool: The research tool requirement is met by successful completion (grade A or B) of EDFN 500-Research Methods, LME 519 Research in LME, EXED 534 Research in Exceptional Education, or equivalent with advisor approval.</p> <p>Specialization: (12 hrs required): Select four of the following courses: LME 545 Educational Technology Production (3 hours) LME 547 Integration of Educational (3 hours) LME 550 Emerging Technology in Education (3 hours) (Prerequisite: LME 537) LME 737 Educational Technology Leadership (3 hours) LME 509 Investigations in Educational Technology (3 hours) and Elective Courses (Minimum of 3 hrs.): Appropriate LME courses or courses outside of LME may be selected with advisor approval.</p> <p>Transfer Credit: No more than 12 hours of previous graduate coursework, whether transferred from another institution or from a previous master's degree from WKU (or a combination of the two), or as a non-degree seeking student at WKU can be</p>
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degree are completed.

Transfer credit cannot be used in place of LME 537 Principles of Educational Technology Applications because it requires development and implementation of an instructional design project that is a foundational component of the LME 590 Practicum.

ICTE Endorsement

The Instructional Computer Technology Endorsement, P-12, prepares teachers for integrating technology into teaching, creating multimedia, interactive instruction, and leadership in educational technology. Certified teachers may obtain the Instructional Computer Technology Endorsement P-12 within a master's degree or as a stand-alone program. The Kentucky P-12 Instructional Computer Technology Endorsement requires a teaching certificate. One-hundred percent of the program is online.

Required courses: Six hours of coursework in Educational Technology are required:

LME 535 Survey of Educational Technology Practices

LME 537 Principles of Educational Technology Applications (Not offered regularly in the summer, Prerequisite: LME 535)

Elective Courses: Student may select six hours from the following list:

LME 545 Educational Technology Production (Prerequisite: LME 537)

LME 550 Emerging Technology in Education (Prerequisite: LME 537)

LME 547 Integration of Educational Technology (Prerequisite: LME 537)

LME 737: Educational Technology Leadership

If a student is completing the LME master's degree program with the Information Services (LMS) Concentration, the student can obtain the Instructional Computer Technology Endorsement P-12 by selecting two additional LME courses from the above list.

As part of an approved program of study, this endorsement can provide certified teachers in Kentucky with professional rank change at the Rank II or Rank I levels

Program Requirements for Teachers Already

used to fulfill program and research tool requirements. Transferred courses cannot be older than 6 years by the time the requirements for the degree are completed.

Transfer credit cannot be used in place of LME 537 Principles of Educational Technology Applications because it requires development and implementation of an instructional design project that is a foundational component of the LME 590 Practicum.

The Capstone Courses

The professional portfolio is the capstone requirement for the program. Students complete the portfolio as part of the practicum or internship courses. There are two capstone courses. LME 590 for students with prior Kentucky teaching certification and LME 592 for students without prior KY teaching certification.

Certified as Library Media Specialists

A person who already holds initial certification as a Library Media Specialist at the graduate or undergraduate level (but not the MS in LME from WKU) must complete 6 semester hours of LME courses and at least 24 hours of other appropriate courses for the MS degree and change in Kentucky teaching rank. Selection of these courses is based on prior experience, previous academic work, and career goals; and requires advisor approval.

Educational Technology Certificate

This is a certificate program for any post-baccalaureate graduate seeking to learn more about integrating technology into teaching or training. This graduate certificate program provides students with essential technology skills, including design and curriculum integration techniques for multimedia presentations, web pages, databases, spreadsheets, instructional software, digital video/audio editing, desktop publishing and more. This graduate certificate program enhances the experiences of educators or business/Information Technology trainers in incorporating technology into instruction and assisting students/employees in their use of technology. This certificate will be listed on the student's transcript upon completion of the program. One-hundred percent of the program is online.

12 Semester Hours of Coursework is required:

Required Courses:

LME 535 Survey of Educational Technology

Practices (Note: Prerequisite for LME 537)

LME 537 Principles of Educational Technology

Applications (Prerequisite: LME 535)

Select any two courses from the following:

LME 545 Educational Technology Production

(Prerequisite: LME 537)

LME 550 Emerging Technology in Education

(Prerequisite: LME 537)

LME 547 Integration of Educational Technology

(Prerequisite: LME 537)

LME 737: Educational Technology Leadership

The Practicum Capstone Course

The Practicum experience provides students with

the opportunity to apply their knowledge and skills in Educational Technology and Library Media Education in a "real world" setting. A total of 120 practicum hours are required in the course. 40 of these hours must be in either an educational technology or library media center assisting students. For these hours, students will be under the supervision of a cooperating educational technology or library media specialist. For students seeking certification, cooperating specialists must be experienced and certified in library media education or educational technology. For students who are not seeking certification, the specialists must have experience working in a private or public sector informational technology setting. These cooperating specialists are not compensated for their time. Their work with students is considered a professional courtesy. The cooperating educational technology or media specialist must be willing to work with students in the practicum setting, maintain contact with the university practicum supervisor, sign the student's time log of practicum activities, and complete an online evaluation of the practicum student's work. Students spend the remaining 80 hours of the practicum working in media centers or other educational settings on activities aligned with state and national standards for educational technology or school media specialists. The university supervisor is responsible for overseeing these activities.

As part of the Practicum class students are also responsible for developing the Professional Portfolio, which is based on the Portfolio Planning Guide developed during in the LME program.

Application for the Practicum Capstone Course

The LME 590 Practicum experience occurs at the end of a student's program and is the capstone course, meaning that students are required to reflect on and demonstrate the knowledge, concepts and skills acquired throughout the LME program. The practicum is comprised of field hours in either an educational technology or library media center and a Professional Portfolio created on a CD/DVD disc. Students gain admission to LME 590 by permission of the instructor, completion of 24 hours of course work including LME 501, 512, 535, and 537; and admission to candidacy (Form D on file). Students must not have any outstanding incomplete courses remaining in their program of studies to be eligible

<p>for the practicum. Students who do not have prior teacher certification and who are seeking LMS certification must be admitted to <u>WKU Teacher Education</u> before being admitted into the practicum. Students must fulfill the above requirements and complete the Application for the Practicum form to be eligible to enroll in the class.</p> <p>Changes in Kentucky Teaching Ranks: The certification programs offered by the Master of Science in LME may be used to obtain the Rank II and Rank I status by Kentucky certified teachers. If a student earned a master's degree in their Rank II program and then completes a Rank I certification only program, 60 unduplicated hours must be earned to obtain the Rank I status. However, if a student completes a Rank II certification only program and a Rank I certification only program, 62 hours must be earned to obtain the Rank I.</p> <p>Kentucky Public Library Certification: The information services (LMS) concentration meets the requirements of the Kentucky Department of Library and Archives Professional Certificate II for Library Directors serving a population of more than 15,000.</p> <p>Program Accreditation: The Library Media Education Program is accredited by the National Council for the Accreditation of Teacher Education (NCATE) and the Association for Educational Communication Technology (AECT). It is recognized by the American Association for School Librarians (AASL) as a nationally recognized master's program for the preparation of school library media specialists.</p>	
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4. Rationale for the proposed program change:

- Students seeking school library certification but do not have prior teaching certification must complete 360 field experience hours—the same number of hours as undergraduate student teachers. The current LME 590 course allows for a 120-hour practicum experience. The LME 592 course will allow the LME staff to better meet the needs of initial certification students through the provision for the Kentucky required 360 field experience hours for initial certification by working in a supervised library media center environment.

- Program description language has been changed to include the new LME 592 course; add the requirement of one literature course to the professional specialization courses; change the electives to one 3 credit course; and update language as needed.
- Delete *Program Requirements for Teachers Already Certified as Library Media Specialists*
This has not been and is not expected to be an advising problem. Students with undergraduate certification and Kentucky LME certification will work with an adviser to develop a program of study to meet current requirements of the LME contract.
- The addition of a literature course in the professional specialization in the LME Concentration will assure that the LME program aligns with the new American Association of School Librarians (AASL) standards.

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

Fall 2011

6. Dates of prior committee approvals:

School of Teacher Education _____12/15/10_____

CEBS Curriculum Committee _____3/1/2011_____

Professional Education Council _____

Graduate Council _____

University Senate _____

Attachment: Program Inventory Form

Proposal Date: 2/16/2011

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

Contact Person: Kevin Williams, kevin.williams@wku.edu, 5-8899

1. Identification of course:

- 1.1 Course prefix (subject area) and number: CHEM 314
- 1.2 Course title: Introduction to Organic Chemistry
- 1.3 Credit hours: 5

2. Current prerequisites: CHEM 222/223

3. Proposed prerequisites: CHEM 222/223 or permission of instructor.

4. Rationale for the revision of prerequisites/corequisites/special requirements: There may be special circumstances (for example, students interested in a proposed nutritional chemistry minor) in which students who would like to take a course in organic chemistry have taken a non-major focused chemistry sequence such as CHEM 105/106/107/108 or CHEM 109. Revision of the prerequisite will indicate to these students that enrollment in CHEM 314 will be possible on a case-by-case consideration.

5. Effect on completion of major/minor sequence: The chemistry major and minor sequences are unaffected, although this adds a possible elective to the nutritional chemistry minor that is being planned.

6. Proposed term for implementation : Fall 2011

7. Dates of prior committee approvals:

Chemistry Department:	<u>February 18, 2011</u>
Ogden College Curriculum Committee	<u>March 3, 2011</u>
Professional Education Council	_____
Undergraduate Curriculum Committee	_____
University Senate	_____

Attachment: Course Inventory Form

Proposal Date: 01/17/2011

**Ogden College of Science and Engineering
Department of Mathematics and Computer Science
Proposal to Revise Course Prerequisites/Co requisites
(Consent Item)**

Contact Person: Mikhail Khenner, mikhail.khenner@wku.edu, 745-2797

1. Identification of course:

- 1.1 Course prefix (subject area) and number: MATH 307
- 1.2 Course title: Introduction to Linear Algebra
- 1.3 Credit hours: 3

2. Current prerequisites/corequisites/special requirements: MATH 137

3. Proposed prerequisites/corequisites/special requirements:

Prerequisite: MATH 136 and either EE 180 or Phil 215, all with a grade of C or better

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

The subject content of MATH 137 (Calculus II) is not relevant to the content of MATH 307, and the mathematical concepts and skills that students acquire in MATH 137 do not contribute to success in MATH 307. By changing the prerequisite from MATH 137 to MATH 136 (Calculus I) with a grade of C or better, students will be able to take MATH 307 and MATH 137 concurrently. Moreover, this change of prerequisite will allow students to enroll in two mathematics courses one semester earlier than is currently the case. PHIL 215 (Elementary Logic) or EE 180 (Digital Circuits) provides solid background in logic that the students in mathematics currently lack. The ability to construct formal logical arguments is very helpful in MATH 307. The PHIL 215 or EE 180 will also improve the general mathematical maturity of the students taking MATH 307.

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

6. Proposed term for implementation: Fall 2011

7. Dates of prior committee approvals:

Mathematics and Computer Science Department 2-18-11

Ogden College Curriculum Committee 3-3-11

Professional Education Council _____

Undergraduate Curriculum Committee _____

University Senate _____

Attachment: Course Inventory Form

Proposal Date: 01/13/2010

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

Contact Person: Mikhail Khenner e-mail: mikhail.khenner@wku.edu Phone: 745-2797
Nezam Iraniparast e-mail: nezam.iraniparast@wku.edu Phone: 745-6281

1. Identification of course:

- 1.1 Current course prefix (subject area) and number: MATH 431
- 1.2 Course title: Intermediate Analysis I
- 1.3 Credit hours: 3.00

2. Revise course title: NA

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

3. Revise course number: NA

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

4. Revise course prerequisites/corequisites/special requirements:

- 4.1 Current prerequisite:
MATH 317, Introduction to Algebraic Systems.
- 4.2 Proposed prerequisite:
MATH 337, Elements of Real Analysis.
- 4.3 Rationale for revision of course prerequisite:
The newly created MATH 337 will serve as a bridge course to facilitate the transition from calculus to analysis. Thus MATH 337 will offer better preparation for MATH 431.
- 4.4 Effect on completion of major/minor sequence: None

5. Revise course catalog listing:

- 5.1 Current course catalog listing:
Topics chosen from cardinality, limits, continuity, elementary topological concepts, sequences and series, differentiation and integration, elementary functional analysis.
- 5.2 Proposed course catalog listing:

Topics in analysis chosen from inverse and implicit function theorems, differentiation, integration, infinite series, series of functions, and elementary functional analysis.

- 5.3 Rationale for revision of course catalog listing:
Some elementary topics are being moved from MATH 431 to MATH 337, allowing other topics to be studied in greater depth.

6. Revise course credit hours: NA

- 6.1 Current course credit hours: NA
6.2 Proposed course credit hours: NA
6.3 Rationale for revision of course credit hours: NA

7. Proposed term for implementation: Fall 2010

8. Dates of prior committee approvals:

Mathematics and Computer Science Department	<u>4-30-10</u>
Ogden College Curriculum Committee	<u>3-3-11</u>
Professional Education Council	_____
Undergraduate Curriculum Committee	_____
University Senate	_____

Attachment: Course Inventory Form

Proposal Date: 01/13/2011

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

Contact Person: Mikhail Khenner e-mail: mikhail.khenner@wku.edu Phone: 745-2797
Nezam Iraniparast e-mail: nezam.iraniparast@wku.edu Phone: 745-6281

1. Identification of course:

- 1.1 Current course prefix (subject area) and number: MATH 432
- 1.2 Course title: Intermediate Analysis II
- 1.3 Credit hours: 3.00

2. Revise course title:

- 2.1 Current course title: Intermediate Analysis II
- 2.2 Proposed course title: Introduction to Measure Theory
- 2.3 Proposed abbreviated title: Intro. to Measure Theory
- 2.4 Rationale for revision of course title:
The new title better reflects the place and function of the course in the current sequence of analysis courses: MATH 337, Elements of Real Analysis; MATH 431, Intermediate Analysis I (changing to Intermediate Analysis); MATH 432, Introduction to Measure Theory.

3. Revise course number:

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

4. Revise course prerequisites/corequisites/special requirements: NA

- 4.1 Current prerequisite: NA
- 4.2 Proposed prerequisite: NA
- 4.3 Rationale for revision of course prerequisite: NA
- 4.4 Effect on completion of major/minor sequence: NA

5. Revise course catalog listing:

- 5.1 Current course catalog listing: Continuation of MATH 431
- 5.2 Proposed course catalog listing:
Algebra of sets, axiom of choice, axioms for the real numbers, continuous functions, Borel sets, Lebesgue measure, Lebesgue integral.
- 5.3 Rationale for revision of course catalog listing:

The current listing is not specific, which often leads to misunderstanding and confusion on the part of students. Introduction to Measure theory is a more advanced study of the mathematical analysis, and is well suited to appear after the two foundational analysis courses MATH 337 and 431.

6. Revise course credit hours: NA

6.1 Current course credit hours: NA

6.2 Proposed course credit hours: NA

6.3 Rationale for revision of course credit hours: NA

7. Proposed term for implementation: Fall 2011

8. Dates of prior committee approvals:

Mathematics and Computer Science Department 1-21-11

Ogden College Curriculum Committee 3-3-11

Professional Education Council _____

Undergraduate Curriculum Committee _____

University Senate _____

Attachment: Course Inventory Form

Proposal Date: 11/5/10

**Ogden College of Science and Engineering
Department of Mathematics and Computer Science
Proposal to Revise Course Credit Hours
(Action Item)**

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

1. Identification of course:

- 1.1 Current course prefix (subject area) and number: MATH 498
- 1.2 Course title: Senior Seminar
- 1.3 Credit hours: 1

2. Proposed course credit hours: 3

3. Rationale for the revision of course credit hours:

Students in this class study the appropriate literature and conduct original/expository research. Their grades are based on a 25-minute presentation and a 7-11 page (single spaced) paper that must be typed with a technical word processor. Almost all presentations are made using Power Point. Recently, we have added more requirements to the students' obligations. For the purpose of keeping the students on task, we now require two additional presentations and attendance at the talks given by others in the class. Even before adding these new requirements, some faculty members believed MATH 498 students deserved more than one hour of credit. With these new changes, the department is convinced that the amount of work involved warrants three credit hours instead of one.

4. Proposed term for implementation: Fall 2011

5. Dates of prior committee approvals:

Mathematics and Computer Science Department 11/15/10

OCSE Curriculum Committee 3/3/11

Professional Education Council _____

Undergraduate Curriculum Committee _____

University Senate _____

Attachment: Course Inventory Form

Proposal Date: January 13, 2011

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

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

1. Identification of program:

- 1.1 Current program reference number: 728 and 528
- 1.2 Current program title: Major in Mathematics
- 1.3 Credit hours: 34 hours (728); 48 hours (528)

2. Identification of the proposed program changes:

- Increase the number of required credit hours for the certifiable major 728 from 34 to 36.
- Increase the number of required credit hours for the non-certifiable major 728 from 34 to 39.
- Increase the number of required credit hours for the extended major 528 from 48 to 51.
- Change the intended goal of non-certifiable major 728.
- Specify the intended goal of non-certifiable major 528.
- Require 12 credit hours of advisor approved supporting courses for non-certifiable major 728.
- Require Elementary Logic, PHIL 215 or Digital Circuits, EE 180 for all 728 and 528 majors.
- Delete the list of sequences for the non-certifiable majors 728 and 528.
- Create lists of limited electives and less limited electives to replace sequences in the non-certifiable majors 728 and 528.
- Offer choices of specific areas in mathematics for non-certifiable major 528.
- Add MATH 431 to the list of required courses for the non-certifiable math major 528.
- Add MATH 370 to the list of elective courses for the non-certifiable math majors 728 and 528.
- Add MATH 473 to the list of elective courses for the non-certifiable math majors 728 and 528.

- Replace CS 180 or 230 with CS 180 or 170 for option 2 major.
- Require that for each mathematics course, all mathematics courses listed as prerequisite for that course must have been completed with a grade of C or better.

3. Detailed program description:

Current Program	Proposed Program
<p data-bbox="284 495 570 527">Major in Mathematics</p> <p data-bbox="284 533 850 783">A major in mathematics provides a Bachelor of Arts degree and requires either a minimum of 34 semester hours for a general major with a minor or second major (reference number 728) or a minimum of 48 semester hours for an extended major (reference number 528).</p> <p data-bbox="284 972 850 1115">Students who wish to declare a 728 or 528 mathematics major will initially be designated as “seeking admission” until the following requirements have been satisfied:</p> <ul data-bbox="332 1157 850 1413" style="list-style-type: none"> • Complete MATH 136, MATH 137, and MATH 307 or MATH 310, with a grade of C or better in each course. • Have an overall GPA of at least 2.4 in mathematics program courses (MATH 136 and above) completed prior to admission. <p data-bbox="284 1455 850 1812">The general major (728) offers two options: (1) Major for Employment in Industry and/or Graduate Studies in Mathematics; (2) Major Certifiable for Teaching Secondary Level Mathematics. The extended major (528) offers only the first option. Option 1 students are required to complete both CS 180 and CS 181. Option 2 students are required to complete either CS 180 or 230.</p> <p data-bbox="284 1854 768 1885"><u>Option 1: Major for Employment in</u></p>	<p data-bbox="873 495 1159 527">Major in Mathematics</p> <p data-bbox="873 533 1440 783">A major in mathematics provides a Bachelor of Arts degree and requires either a minimum of 36-39 semester hours for a general major with a minor or second major (reference number 728) or a minimum of 51 semester hours for an extended major (reference number 528).</p> <p data-bbox="873 789 1414 932">Note: All mathematics courses listed as prerequisites for other courses must have been completed with a grade of C or better.</p> <p data-bbox="873 972 1440 1150">Students who wish to declare a 728 or 528 mathematics major will initially be designated as “seeking admission” until the following requirements have been satisfied:</p> <ul data-bbox="922 1192 1440 1486" style="list-style-type: none"> • Complete MATH 136, MATH 137, and MATH 307 or MATH 310, with a grade of C or better in each course. • Have an overall GPA of at least 2.4 in mathematics program courses (MATH 136 and above) completed prior to admission. <p data-bbox="873 1528 1440 1854">The general major (728) offers two options: (1) Non-certifiable Major in Mathematics; (2) Major Certifiable for Teaching Secondary Level Mathematics. The extended major (528) offers only the first option. Option 1 students are required to complete both CS 180 and CS 181. Option 2 students are required to complete either CS 170 or 180.</p>

<p>Industry and/or Graduate Studies in Mathematics</p> <p>(A) General Major (728): The student must complete a minimum of 34 hours of mathematics with a minor or second major giving a total of at least 54 hours (48 unduplicated) with the following requirements:</p> <ol style="list-style-type: none"> 1. MATH 136, 137, 237, 307, 310, 317, 337, 498. 2. At least one of the sequences: MATH 317-417; 331-435; 337-431; 337-450; 382-482; 405-406. 3. At least 6 hours of 400-level mathematics other than MATH 475. <p>Other acceptable courses for the general major are MATH 275 (up to 3 hours), 305, 315, 323, 331, 382, 398 (up to 3 hours), 405, 406, 415, 417, 423, 431, 432, 435, 439, 450, 470, 475 (up to 6 hours), 482, and STAT 301.</p> <p>(B) Extended Major (528): The student must complete a minimum of 48 hours of mathematics with the following requirements:</p> <ol style="list-style-type: none"> 1. MATH 136, 137, 237, 307, 310, 317, 337, 498. 2. At least one of the sequences: MATH 317-417; 331-435; 337-431; 337-450; 382-482; 405-406. 3. At least 12 hours of 400-level mathematics. <p>Other acceptable courses for the extended major are MATH 275 (up to 3 hours), 305, 315, 323, 331, 382, 398 (up to 3 hours), 405, 406, 409, 415, 417, 423, 431, 432, 435, 439, 450, 470, 475 (up to 6 hours), 482, and STAT 301.</p>	<p>Option 1: Non-certifiable Major in Mathematics.</p> <p>(A) General Major (728): To prepare for employment in industry, the student must complete a minimum of 39 hours of mathematics with a minor or second major, giving a total of at least 59 hours (53 unduplicated) with the following requirements:</p> <ol style="list-style-type: none"> 1. MATH 136, 137, 237, 307, 310, 317, 337, 498. 2. Two courses from MATH 405, 406, 415, 417, 423, 431, 432, 435, 439, 450, 470, 473, 482. 3. Six elective hours from MATH 275 (up to 3 hours), STAT 301, MATH 305, 315, 323, 331, 370, 382, 398 (up to 3 hours), 405, 406, 415, 417, 423, 432, 435, 439, 450, 470, 475 (up to 6 hours), 482. 4. Students may take certain 500-level mathematics courses for undergraduate credit with the approval of the Dept. Head in place of courses listed in items 2 or 3. 5. In addition, 12 credit hours of supporting courses from the Ogden College of Science and Engineering or Gordon Ford College of Business (courses such as mathematics, statistics, sciences, engineering, economics, finance and accounting) are required. These courses must be approved by the mathematics and computer science department head. These hours will not count toward a first minor nor usually toward a second major. 6. Also required is Elementary Logic PHIL 215, or Circuit Design, EE 180. 7. Note: This major is not intended to prepare students adequately for graduate mathematics. Students intending to seek a graduate degree
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(B) Extended Major (528): The student must complete a minimum of **48** hours of mathematics with the following requirements:

1. MATH 136, 137, 237, 307, 310, 317, 337, 498.
2. **At least one of the sequences:** MATH 317-417; 331-435; 337-431; 337-450; 382-482; 405-406.
3. **At least 12 hours of 400-level mathematics.**

Other acceptable courses for the extended major are MATH 275 (up to 3 hours), 305, 315, 323, 331, 382, 398 (up to 3 hours), 405, 406, 409, 415, 417, 423, 431, 432, 435, 439, 450, 470, 475 (up to 6 hours), 482, and STAT 301.

should pursue major 528.

(B) Extended Major (528): **To prepare for graduate study in mathematics**, the student must complete a minimum of **51** hours of mathematics with the following requirements:

1. MATH 136, 137, 237, 307, 310, 317, 337, **431**, 498.
2. **Emphasis in one of the following areas B1, B2 or B3.**

B1. Fundamentals of Analysis and Discrete Mathematics.

- i. MATH 417, 439, 450.
- ii. **Two courses from** MATH 315, 323, 415, 423, 432, **473**.
- iii. **Six additional elective hours from** MATH 275 (up to 3 hours), STAT 301, MATH 305, 315, 323, 331, **370**, 382, 398 (up to 3 hours), 405, 406, 409, 415, 423, 432, 435, 470, **473**, 475 (up to 6 hours), 482.

B2. Fundamentals of Applied Mathematics.

- i. MATH 331, **370**, 382, 405.
- ii. **Two courses from** MATH 305, 406, 435, 470, 482.
- iii. **Three credit hours from** MATH 275, STAT 301, MATH 305, 315, 323, 398, 406, 409, 415, 417, 423, 432, 435, 439, 450, 470, **473**, 475, 482.

B3. Fundamentals of Mathematical Studies.

- i. MATH 450.
- ii. **Two courses from** MATH 405, 406, 409, 415, 417, 423, 432, 435, 439, 470, **473**, 482.
- iii. **Twelve additional electives from** MATH 275 (up to 3 hours), STAT

<p><u>Option 2:</u> Major Certifiable for Teaching Secondary Level Mathematics (reference number 728): The student must complete a minimum of 34 hours of mathematics with a second major in Science and Mathematics Education (SMED). The following courses are requirements:</p> <ol style="list-style-type: none"> MATH 136, 137, 237, 304, 307, 310, 317, 323, 498; STAT 301. Before the professional semester, the student must complete each of these courses with a grade of “C” or better <u>and</u> achieve a GPA of at least 2.5 in mathematics. <ol style="list-style-type: none"> At least 3 hours of 400-level mathematics from the following list: MATH 405, 406, 409, 415, 417, 421, 423, 431, 432, 435, 439, 450, 470, 482. 	<p>301, MATH 305, 315, 323, 331, 370, 382, 398 (up to 3 hours), 405, 406, 409, 415, 423, 432, 435, 470, 473, 475 (up to 6 hours), 482.</p> <p>3. Students may take certain 500-level mathematics courses for undergraduate credit in place of courses listed in items B1i, B1ii, B2i, B2ii, B3i, or B3ii with the approval of the mathematics and computer science Dept. Head. No minor or a second major for the extended major is required.</p> <p><u>Option 2:</u> Major Certifiable for Teaching Secondary Level Mathematics (reference number 728): The student must complete a minimum of 36 hours of mathematics with a second major in Science and Mathematics Education (SMED). The following courses are requirements:</p> <ol style="list-style-type: none"> MATH 136, 137, 237, 304, 307, 310, 317, 323, 498; STAT 301. Before the professional semester, the student must complete each of these courses with a grade of “C” or better <u>and</u> achieve a GPA of at least 2.5 in mathematics. Three hours of 400-level mathematics from the following list: MATH 405, 406, 409, 415, 417, 421, 423, 435, 439, 450, 470, 431432, 482. Also required is Elementary Logic PHIL 215, or Circuit Design EE 180.
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4. Rationale for the proposed program changes:

- When we decreased the number of hours in the calculus sequence, we created a situation in which students could complete the major by taking MATH 398 for one hour of credit. We believe students would benefit more by enrolling in a one 3-credit upper division

mathematics course. Hence, we propose to increase the number of credit hours in the certifiable major (728) by 2 hours.

- Two of the 5 extra credit hours in the non-certifiable major 728 are added for the same reason as above. The other 3 credit hours are added to this major to increase the number of elective courses so the students can explore other areas of mathematics.
- We added 3 extra hours to strengthen the program for our students pursuing a graduate degree, as is the intended goal of this major.
- Based on our past experience, the current non-certifiable major 728 does not adequately prepare our students for graduate work or employment in industry. However, by requiring supporting course work the students in this major should be better equipped to start a career in industry.
- Based on our experience the extended major 528 does lay a firm foundation for graduate studies in mathematics.
- The added 12 hours of supporting course work should enable our students to launch a more successful bid for work in industry. This is also done in other institutions in our close proximity (e.g., Murray State and Middle Tennessee State).
- Based on our experience the students will better understand proofs in mathematics if they have some background in the principles of formal logical argument.
- The intention of the two types of electives is to build a mathematical foundation and still allow flexibility in the student's choices.
- Since the intended goal of major 528 is for graduate school preparation, students will benefit from an early exposure to specific areas in mathematics.
- MATH 431 (Intermediate Analysis) together with the new course MATH 337 (Elements of Real Analysis) will provide our students in major 528 with a good foundation necessary for graduate work.
- MATH 370 (Applied Techniques in Mathematics) is a new course with enhanced topics to serve both engineering students and mathematics majors and minors. We believe it is a worthwhile course to include in the list of electives.
- The newly created course MATH 473 (Introduction to Graph Theory) contains an attractive list of topics that will be beneficial to the mathematical experience of our majors.

- Based on our past experience, students with grades C or better in prerequisite courses perform more successfully in subsequent courses.

5. Proposed term for implementation and special provisions: Fall 2011.

6. Dates of prior committee approvals:

Mathematics and computer Science: January 21, 2011

OCSE Curriculum Committee March 3, 2011

Professional Education Council _____

Undergraduate Curriculum Committee _____

University Senate _____

Attachment: Program Inventory Form