

BEREA COLLEGE
2009 – 2010 CURRICULUM GUIDE (revised 10/27/09)
B. A. in MATHEMATICS EDUCATION WITH
SECONDARY TEACHING CERTIFICATION, GRADES 8-12

NOTE: This guide is subject to change and represents actions approved by Faculty to date. Please refer often to the 2009-2010 *Online Catalog & Student Handbook* (www.berea.edu/catalogandhandbook), which will be updated with the most current information.

GENERAL EDUCATION PROGRAM

Core Courses

	<u>Term</u>	<u>Credit</u>
MAT 010: Prealgebra ^a	_____	NC
MAT 011: Elementary Algebra I ^a	_____	NC
MAT 012: Elementary Algebra II ^a	_____	NC
GSTR 110: Writing Sem. I: Critical Thinking in the Liberal Arts	_____	1
GSTR 210: Writing Sem. II: Identity and Diversity in the United States	_____	1
GSTR 310: Und. of Christianity	_____	1
GSTR 332: Scien. Knowl. & Inquiry	_____	1
GSTR 410: Sr. Sem. in Cont. Global Issues	_____	1

Lifetime Health & Fitness: PEH 100 & Phys. Activity

PEH 100: Introduction to Lifetime Wellness	_____	.50
<i>(if swimming proficiency test not passed, one of next two courses must be PED 200)</i>		
PED 2____: _____	_____	.25
PED 2____: _____	_____	.25

Practical Reasoning Across the Curriculum (PR & PRQ)

Two courses—at least one firmly grounded in math or statistics (PRQ); the other can be an approved practical reasoning (PR) course or another PRQ course.

_____ : _____	_____	1
_____ : _____	_____	1

Perspectives—Six Areas Required

Students will satisfy each of the six Perspective areas by taking or waiving a course, or through an approved experience. Individual courses may be approved to satisfy more than one Perspective, but no single course may satisfy more than two Perspective areas.

1. Arts _____
2. Social Science _____
3. Western History _____
4. Religion _____
5. Afr. Amer., Appal., Women's _____
6. International (two courses either in area 6A or area 6B):
 - A) Same Non-English Language _____
 - Same Non-English Language _____
 - (one course may be waived by placement exam)
 - OR**
 - B) World Culture (Non-western) _____
 - World Culture (Western/non-western) _____

Active Learning Experience (ALE)

An approved experience, taken for credit or as noncredit.

_____ : _____	_____	_____
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Writing Competency Requirement (thru Spring 2009)

(NOTE: Required for students entering in/before Spring 2009—not required for those entering in/after Fall 2009)

Students may satisfy this requirement by passing the Writing Competency Examination administered in Fall and Spring, or by successfully completing GST 150: College Composition or ENG 104: Advanced ESL.

_____ : _____	_____	_____
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^aMay be waived on basis of test scores.

MAJOR COURSES

Core Courses

A minimum of 8.25 MAT courses at or above 210 level, plus one required CSC course:

MAT 135: Calculus I (or waiver) ^b	_____	_____
MAT 214: Linear Algebra	_____	1
MAT 225: Calculus II (or waiver)	_____	_____
MAT 315: Fund. Concepts of Math.	_____	1
MAT 330: Calculus III	_____	1

Capstone Course

MAT 492: Senior Seminar (Capstone)	_____	.25
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Distribution Courses (Required; count inside the major)

At least one MAT course must be chosen from each of the following four groups; courses may satisfy more than one category:

- a) Theoretical: MAT 321, 432, 434, or 436
- b) Applied: MAT 311, 312, 433, or 438
- c) Analysis: MAT 433, 434, 435, or 437
- d) Nonanalysis: MAT 311, 312, 321, 432, 436, or 438

a-MAT _____:	_____	1
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b-MAT _____:	_____	1
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c-MAT _____:	_____	1
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d-MAT _____:	_____	1
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Collateral Course (Required; counts outside the major)

One course chosen from the following:

- CSC 125: Intro. to Computer Science **OR**
 CSC 126: Intro. to Robotics **OR**
 CSC 226: Intro. to Programming with C++ **OR**
 CSC 236: Algorithms, Objects & Data Abstrac. _____ 1

Senior Level Requirement (count inside the major)

At least two courses must be taken from MAT 432, 433, 434, 435, 436, 437, and 438. Each of these courses also may be used to satisfy the distribution requirements described above.

MAT _____:	_____	1
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MAT _____:	_____	1
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Education Studies Courses (Required; count outside the major)

EDS 150: Introduction to Education	_____	1
EDS 228: Teaching as Research	_____	1
MAT 308: Teaching of Mathematics	_____	1
EDS 349: Education and Culture	_____	1
EDS 355: Ext. Experience in Alt. Settings	_____	_____
OR an approved alternative	_____	1

Professional Terms (Counts outside the major)

EDS 479: Learning & Assessment in Secondary Classrooms	_____	1 ^c
EDS 480: Students with Special Needs	_____	1 ^c
EDS 481: Sec. Student Teaching Seminar	_____	1 ^d
EDS 482: Secondary Student Teaching (P-12, 5-12, 8-12)	_____	3 ^d

^bMay be waived by passing waiver test, but then an additional course above MAT 135 is recommended.

^cOffered Spring Term only; must be taken in eighth term. EDS 479 and 480 will have a 3-4 hour block daily practicum associated with them, time TBA.

^dOffered Fall Term only; must be taken in ninth term.

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