BEREA COLLEGE
2010 – 2011 CURRICULUM GUIDE (revised 8/22/10)

B.A. in MATHEMATICS

NOTE: This guide is subject to change and represents actions approved by Faculty to date. Please refer often to the *2010-2011 Online Catalog & Student Handbook (www.berea.edu/cataloghandbook),* which will be updated with the most current information.

GENERAL EDUCATION PROGRAM

NOTE: No single college course transferred into Berea can meet more than one General Education requirement.

Core Courses	**Term**	**Credit**
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[b]	_____	___
GSTR 210: Writing Sem. II: Identity and Diversity in the United States	_____	1
GSTR 310: Understandings of Christianity	_____	1
GSTR 410: Sr. Sem. in Cont. Global Issues	_____	1

Scientific Knowledge and Inquiry

GSTR 332: Scientific Knowledge & Inquiry	_____	___

OR

Two approved science courses, one of which must be an approved lab course. At this time, only the following courses have been approved to meet this alternative (all of which meet the lab course stipulation): ANR 110, 130, BIO 100, BIO 101, 110, CHM 113, 131, 134, PHY 111, 217, or 315

_____ ____: _____	_____	___
_____ ____: _____	_____	___

Lifetime Health & Fitness: PEH 100 & Phys. Activity

PEH 100: Introduction to Lifetime Wellness	_____	.50
(if swimming proficiency test not passed, take PED 200)		
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 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.

_____ ____: _____	_____	_____

[a] May be waived on basis of test scores.

[b] Transfer students might waive GSTR 110 if they took College Composition as a degree-seeking student at another college AND earned a grade of B or higher.

MAJOR COURSES

Core Courses	**Term**	**Credit**
A minimum of 8.25 MAT courses at or above 210 level, plus one required CSC course:		
MAT 135: Calculus I (or waiver)[c]	_____	___
MAT 214: Linear Algebra	_____	1
MAT 225: Calculus II (or waiver)	_____	___
MAT 315: Fund. Concepts of Mathematics	_____	1
MAT 330: Calculus III	_____	1

Capstone Course

MAT 492: Senior Seminar (1/4 credit)		
OR		
Approved research experience	_____	___

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
b-MAT _____: _____	_____	1
c-MAT _____: _____	_____	1
d-MAT _____: _____	_____	1

Collateral Course Credit (Required; counts outside major)

One course credit 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 course credits 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
MAT _____: _____	_____	1

ELECTIVES (count in 20 credits outside the major, unless course is in MAT rubric)

Dept. & No.	Title	Term	Credit
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

[c] May be waived by passing waiver test, but then an additional course above MAT 135 is required.