BEREA COLLEGE

2009 - 2010 CURRICULUM GUIDE (as of 10/28/09)

B.A. in APPLIED SCIENCE AND MATHEMATICS

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/cataloghandbook),* which will be updated with the most current information.

GENERAL EDUCATION PROGRAM

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	_____	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

(if swimming proficiency test not passed, one of next two courses must be 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 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.

_____ ____: _____ _____ _____

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.

_____ ____: _____ _____ _____

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

MAJOR COURSES

Core Courses	Term	Credit
CHM 131: Accel. General Chemistry	_____	1
CHM 311: Quantitative Analysis	_____	1
MAT 135: Calculus I	_____	1
MAT 225: Calculus II	_____	1
MAT 330: Calculus III	_____	1
MAT 437: Differential Equations	_____	1
PHY 315: Intro. Physics I w/Calculus	_____	1
PHY 316: Intro. Physics II w/Calculus	_____	1

Capstone Course

(approved by Dual Degree Engineering Adviser)[b]

_____ _____ _____ ___

Distribution Courses (Required; count inside the major)

Three course credits—chosen from ANR, BIO, CHM, CSC, MAT, PHY, SENS, or TEC courses—must be approved by the Dual Degree Engineering Adviser[b] **AND** be applicable to a single engineering specialty (e.g., Biosystems and Agriculture, Chemical, Civil, Computer, Electrical, Material, Mechanical, or Mining Engineering.)

_____: _____ _____ _____

_____: _____ _____ _____

_____: _____ _____ _____

SHORT TERMS

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

ELECTIVES (count in 21 credits outside the major, unless in the major rubric)

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

[b] Under most circumstances, this will be an upper-level engineering course taken at an accredited engineering institution, but it might also be an approved internship, or other approved capstone-level course.

NOTE: The Dual Degree Engineering Adviser (Dr. Tracy Hodge in the Physics Department) will serve as the student's primary adviser once accepted into this major.