

BEREA COLLEGE
2005 - 2006 CURRICULUM GUIDE (revised 4/17/07)
**B.A. in CHEMISTRY WITH SECONDARY TEACHING CERTIFICATION
IN CHEMISTRY, GRADES 8-12**

NEW GENERAL EDUCATION PROGRAM

(Continue to watch the Catalog (www.berea.edu/catalog) for a listing of courses that have been approved to satisfy General Education requirements under the new program.)

Core Courses	Term	Credit
MAT 010: Developmental Mathematics I ^a	_____	NC
MAT 011-012: Developmental Mathematics II ^a	_____	NC
GSTR 110: Writing Sem. I: Critical Thinking in the Liberal Arts (or <u>GSTR 100</u>)	_____	1
GSTR 210: Writing Sem. II: Identity and Diversity in the United States (or <u>GSTR 203</u>)	_____	1
GSTR 310: Und. of Christianity (<u>GSTR 220 or 221</u>)	_____	1
GSTR 332: Scien. Knowl. & Inquiry (<u>GSTR 232</u>)	_____	1
GSTR 410: Sr. Sem. in Cont. Global Issues	_____	1

Lifetime Health & Fitness: PEH 100 & Phys. Activity

PEH 100: Introduction to Lifetime Wellness	_____	.50
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)^b:
 - 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 _____

Active Learning Experience (approved experience; for credit or noncredit)

_____ : _____

Writing Competency Exam or GST 150

Students who pass and/or transfer in both GSTR 100 and GSTR 203 before Fall 2006 are considered to have met this requirement. Students entering in/after Fall 2006 will have a writing competency test administered during GSTR 110 and GSTR 210. Students not at competency level by end of their first year **must** enroll in and successfully complete GST 150: College Composition by the **end of their fourth term**, or be automatically suspended from College.

_____ : _____

^aMay be waived on basis of test scores.

MAJOR COURSES

Core Courses

	Term	Credit
CHM 121: Structure ^c OR	_____	_____
CHM 124, Environmental Chemistry ^c	_____	1
CHM 221/321: Organic Chemistry I	_____	1
CHM 222/322: Organic Chemistry II	_____	1
CHM 341: Quantitative Analysis	_____	1
CHM 345: Biochemistry	_____	1
CHM 370: Advanced LAB I*	_____	0.5
CHM 371: Advanced LAB II*	_____	0.5
CHM 470: Advanced LAB III*	_____	0.5
CHM 471: Advanced LAB IV*	_____	0.5
_____ : Research Experience ^d	_____	1 or NC

Two additional courses chosen from: CHM 361, 362, 451, 452, one of which **must** be CHM 361 or 362^e

CHM _____	_____	1
CHM _____	_____	1

Collateral Courses (required, but count outside major.

To be completed before second term of Junior year, except for PHY 218, which may be taken concurrently with CHM 361)

PHY 217: General Physics I OR	_____	_____
PHY 315: Introductory Physics I w/Calculus ^f	_____	1
PHY 218: General Physics II OR	_____	_____
PHY 316: Introductory Physics II w/Calculus ^f	_____	1
MAT 110 or 115 or 125	_____	1
MAT 220: Calculus I	_____	1
MAT 225: Calculus II	_____	1

^bSome graduate programs in chemistry require a reading knowledge of a second language. Students without a reading knowledge of a second language are encouraged to satisfy this requirement by completing Perspective 6A (language option).

^cCredit cannot be received for both CHM 121 and 124.

^dResearch experiences include CHM 490, CHM 498, the Short Term research course, or an approved Summer research project. See *Catalog*.

^eStudents who plan to attend graduate school in any area related to chemistry should take **both** CHM 361 and 362.

^fStudents with a strong mathematics background are encouraged to take the calculus-based physics sequence of PHY 315/316 instead of PHY 217/218.

***NOTE: All majors must pass a departmental proficiency exam administered in the senior year in order to graduate. Also as part of the laboratory component, all students maintain a chemistry portfolio that must meet departmental standards and are required to make at least two oral presentations—one on campus and one off campus.**

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