

Chemistry Major-B.A. with Teacher Certification



The chemistry program offers students to choose between a Bachelor of Science(B.S.) degree or a Bachelor of Arts(B.A.) degree. Students wishing to pursue a graduate degree in chemistry or employment in the chemical industry should pursue the BS degree. The BA degree is designed for those seeking secondary education certification in chemistry as well as for several pre-professional majors (pre-dental, pre-medical, pre-pharmacy, etc.). Students pursuing careers in dentistry, medicine, and pharmacy generally major in chemistry with minor in biology or the converse.

Bachelor of Arts in Chemistry

Requirements min. 48 hours

CHE 109 Technical Writing & lab Safety	1
CHE 111 General Chemistry I	3
CHE 112 General Chemistry II	3
CHE 113 General Chemistry I Lab	1
CHE 114 General Chemistry II Lab	2
CHE 221 Analytical Chemistry	3
CHE 223 Analytical Chemistry Lab	1
CHE 341 Organic Chemistry I	3
CHE 342 Organic Chemistry II	3
CHE 343 Organic Chemistry I Lab	1
CHE 380 Junior Seminar	1
CHE 411 Physical Chem. For Life Sci.	3
CHE 412 P. Chem. For Life Sci. Lab	1
CHE 450 Methods of Science Teaching*	3
CHE 460 Biochemistry	3
CHE 480 Senior Seminar	1
<i>BA Foreign Language Requirement</i>	12 hrs

B.A. Major Electives 3 hrs

CHE 315 Research Methods	2
CHE 344 Organic Chemistry II Lab	2
CHE 350 Instrumental Analysis	4
ENV 355 Environmental Chemistry	4
CHE 370 Inorganic Chemistry	3
CHE 390 Junior Research	1-3
CHE 400 Special Topics	3
CHE 490 Senior Research	1-3

B.A. Major Supporting courses 23-25 hrs

MTH 210 Calculus I	4
MTH 211 Calculus II	4
BIO 200 Biological Concepts	3
GEO 105 Introduction to Earth Science	3
GEO 106 Intro. to Earth Science Lab	1
PHY 141, PHY 142, PHY 143, PHY 144	8
<i>Or</i> PHY 241, PHY 242, PHY 243, PHY 244	or 10

Professional Studies Courses 33 hrs

For 9-12 secondary teacher certification, the curriculum requires the completion of the general education component and a single major (in certifiable disciplines). [Two certifiable majors may also be completed.] Certification in a minor field is no longer advised as the Praxis specialty area examinations must be successfully completed for the minor to appear on the teaching certificate. Secondary teacher certification will satisfy the University's requirement for a minor. *The completion of teacher certification with a secondary teaching major will take a minimum of three semesters including the student teaching semester.*

ED 102 Intro. Teacher Education	3
ED 210 Basic Concepts in Education	3
ED 320 Human Development and Learning Theory	3
ED 310 Instructional Technology	3
ED 325 Exceptional Child	3
ED 390 Assessment and Instructional Strategies	3
ED 416 Curriculum and Methodology	3
ED 450 Student Teaching, 8-12*	12

*No classes are to be taken *during* the student teaching semester other than student teaching. Exceptions *must* be appealed to the Dean and faculty of the School of Education.

[revised 8/2010]

Summary of Chemistry-B.A. Teacher Education Program

Suggested Course Sequence

B.A. Chemistry Degree with Teacher Certification

B.A. Major Requirements	36 hrs
B.A. Major Electives	3 hrs
B.A. Supporting Courses	23-25 hrs
B.A. Foreign Language Requirement	12 hrs
Professional Studies Courses	33 hrs

Required Minor (Secondary Education Minor from above)

General Education	35 hrs
Physical Education	3 hrs
Literature	3 hrs
Christian Studies	6 hrs
Art, Drama, Music	2 hrs
English Composition	6 hrs
Mass Communication	3 hrs
Mathematics (included in major requirements)	
Computing & Technology	3 hrs
Biological Science (included in major requirements)	
Physical Science (included in major requirements)	
Psychology/Sociology/Culture/Economics	6 hrs
History/Political Science	3 hrs
Total Hours	142 hrs

Freshman Year

Fall Semester	Hours
CHE 111/113 General Chemistry I and Lab	4
CHE 109 Technical Writing & Lab Safety	1
ENG 111 Freshman Composition I	3
OR 100 Freshman Year Experience	1
MTH 210 Calculus I	4
BIO 200 Biological Concepts	3

Spring Semester

CHE 112/114 General Chemistry II and Lab	5
ENG 112 Freshman Composition II	3
MTH 211 Calculus II	4
PHY 241/243 General University Physics and Lab	5

Sophomore Year

Fall Semester	Hours
CHE 221/223 Analytical Chemistry and Lab	4
ED 102 Introduction to Education	3
PHY 242/244 General University Physics	5
General Education/Electives	3
BA Foreign Language Requirement	3

Spring Semester

CHE 315 Research Methods	2
CHE 350 Instrumental Analysis	4
ED 210 Basic Concepts & Philosophy of Education	3
TH 120 Fundamentals of Speech or	
MAC 140 Introduction to Communication	3
General Education	4

Junior Year

Fall Semester	Hours
CHE 341/343 Organic Chemistry I and Lab	4
CHE 380 Junior Seminar	1
CHE 411/412 Physical Chem. Life Sci. I and Lab	4
ED 300 Human Development and Learning Theory	3
ED 310 Instructional Technology	3
BA Foreign Language Requirement	3

Spring Semester

CHE 342 Organic Chemistry II	3
CHE 460 Biochemistry	3
ED 325 The Exceptional Child	3
BA Foreign Language Requirement	3
CIS 100 Computer Concepts & Applications	3
General Education	3

Senior Year

Fall Semester	Hours
CHE 450 Methods of Science Teaching	3
CHE 480 Senior Seminar	1
CHE Elective	3
ED 390 Assessment & Instructional Strategies	3
ED 416 Curriculum & Methodology	3
BA Foreign Language Requirement	3
General Education/Electives	2

Spring Semester

ED 450 Student Teaching	12
-------------------------	----

CAMPBELLVILLE UNIVERSITY

Natural Science Division
Campbellsville University
1 University Drive
Campbellsville, KY 42718-2799

Phone: 270-789-5065

Fax: 270-789-5170

E-mail: naturalscience@campbellsville.edu