

Gateway to



Learning - Discovery - Community

# CHEMISTRY/TEACHING (B.A.)

DEPARTMENT OF CHEMISTRY  
COLLEGE OF ARTS & SCIENCES  
EASTERN KENTUCKY UNIVERSITY

## Chemistry/Teaching at EKU

The chemistry-teaching program at EKU prepares students by offering the full Bachelor of Arts in Chemistry that includes both classroom principles and laboratory applications and supplementing it with the full array of education courses required for certification in the Commonwealth of Kentucky. Both the College of Education and the Department of Chemistry are highly regarded for the quality of the education they provide. The Chemistry Department's emphasis on understanding chemical principles and their application will help students launch successful teaching careers and continue their professional growth and education as in-service teachers.

## Careers in Chemistry/Teaching

Because chemistry is the central science of our modern technological society, its study is an essential element of a good high school education. In the Commonwealth and throughout the nation, there is a strong demand for well-trained chemistry teachers. Students who also earn a minor in a related field (e.g., biology, physics, math, computer science or geology) have an added advantage as they can be certified to teach a second field. Individuals completing the B.A. degree for chemistry teaching are also prepared for industrial jobs in chemical fields.

## Degree Programs

In addition to the B.A. in Chemistry/Teaching, the Department offers traditional BA and B.S. programs, which support a variety of pre-professional programs, and a B.S. in Forensic Science with chemistry and biology options. The Pre-Pharmacy and Pre-Chemical Engineering 2+2 and 3+2 programs can culminate in early transfer or completion of a degree at EKU.

## Eastern Kentucky University

If you are serious about learning, Eastern Kentucky University is your kind of place. We're committed to helping you realize your potential and achieve your goals. And we'll work hard to provide you with a quality, life-changing learning experience.

As a student at EKU, you'll be taught, challenged and guided by professors who put teaching first. And because we maintain high standards set by national and regional accrediting agencies, we'll have high expectations for you as a student. You'll work hard, and we'll help you succeed.

Most of your classes at EKU will be small and will be taught by professors, not graduate students. You'll study in modern classrooms, laboratories, libraries and other facilities using state-of-the-art technology and equipment. And you'll discover opportunities to enhance classroom learning with hands-on experience through internships or the cooperative education program.

- A comprehensive, public university serving more than 16,000 students.
- Undergraduate and graduate excellence through more than 160 associate, baccalaureate, master's, specialist and cooperative doctoral programs.
- Quality and diversity in faculty and staff.
- Student/professor ratio of 17:1  
66-acre main campus in Richmond, educational centers in Corbin, Danville and Manchester, and academic offerings at other sites throughout the Commonwealth.

## For More Information

Office of Admissions  
SSB CPO 54  
Eastern Kentucky University  
521 Lancaster Avenue  
Richmond, KY 40475-3102  
[www.admissions.eku.edu](http://www.admissions.eku.edu)  
800-465-9191  
859-622-2106

Department of Chemistry  
Moore 337  
Eastern Kentucky University  
521 Lancaster Avenue  
Richmond, KY 40475-3102  
[www.chemistry.eku.edu](http://www.chemistry.eku.edu)  
859-622-1456

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Eastern Kentucky  
University

[WWW.EKU.EDU](http://WWW.EKU.EDU)

# CHEMISTRY/TEACHING (B.A.)

**Major Requirements** ..... 30-31 hours  
CHE 111, 115, 112, 116 or 116H, 325, 361, 362, 366, 367, 470, plus six hours of upper division chemistry electives (which may include FOR 411).

**Supporting Course Requirements** ..... 14-54 hours

**Chemistry Option** ..... 14 hours  
MAT 124\*; PHY 131 or 201; PHY 132 or 202.

**Chemistry Teaching Option\*\*:** ..... 54 hours  
MAT 124\*; PHY 131 or 201; PHY 132 or 202; CNM 101, 102; EDF 103, 203; EPY 319, 413; SED 401; ESE 490, 499, 561; GLY 302.

**General Education Requirements** ..... 36 hours  
Standard General Education program, excluding blocks II, IVB, and VIII (6 hours). Refer to Section Four of this *Catalog* for details on the General Education and University requirements.

**University Requirement** ..... 1 hour  
ASO 100.

**Free Electives** ..... 8-47 hours

**Total Curriculum Requirements** ..... 128 hours

\* A preparatory course in mathematics (MAT 109) may be required before admission to MAT 124.

\*\* Following this curriculum and passing the appropriate standardized teacher exams will lead to certification to teach chemistry at the secondary education level.

## MINOR IN CHEMISTRY

A student may minor in chemistry by completing CHE 111, 115, CHE 112, 116 or 116H plus an additional 12 hours of upper division chemistry.

## MINOR IN CHEMISTRY (TEACHING)

A student may obtain a teaching minor in chemistry by completing CHE 111, 115, CHE 112, 116 or 116H plus an additional 12 credits of upper division chemistry.

[Note: Given the scope of the required PRAXIS exam that must be passed for a certificate extension in chemistry, the following courses are particularly recommended for students seeking a teaching minor in chemistry: CHE 325, 330, 361/366, and 470.]

## MAJOR COURSES

CHE 111	General Chemistry I
CHE 112	General Chemistry II
CHE 115	General Chemistry Lab I
CHE 116	General Chemistry Lab II
CHE 116H	General Chemistry Honors Lab II
CHE 325	Quantitative Analytical Chemistry
CHE 361	Organic Chemistry I
CHE 362	Organic Chemistry II
CHE 366	Organic Chemistry Lab I
CHE 367	Organic Chemistry Lab II
CHE 470	Principles of Physical Chemistry

## SUPPORTING COURSES

CNM 101	Cosmos and Evolution I
CNM 102	Cosmos and Evolution II
GLY 302	Earth Science
MAT 124	Calculus I
PHY 131	College Physics I
PHY 132	College Physics II
PHY 201	University Physics I
PHY 202	University Physics II

## PROFESSIONAL EDUCATION COURSES

EDF 103	Intro. to Education
EDF 203	Schooling and Society
EDF 319	Human Development and Learning
EDF 413	Assessment in Education
ESE 490	Secondary Curriculum, Classroom Organization, and Management
ESE 499	Supervised Student Teaching in the Secondary School
ESE 561	Teaching Science in the Secondary School
SED 401	Exceptional Learners in Inclusive Classrooms