

B.S.ED. IN CHEMISTRY

College of Education and Social Work

Curriculum

Code	Title	Credits
GENERAL EDUCATION REQUIREMENTS (http://catalog.wcupa.edu/undergraduate/general-education-requirements/)		
Academic Foundations		
First Year Experience requirement		4
English Composition requirement		6-7
Mathematics requirement		3-4
Interdisciplinary requirement		3
Diverse Communities requirement		3
Ethics requirement ⁸		3
Distributed Disciplinary Foundations		
Science requirement		6-8
Behavioral & Social Science requirement		6
Humanities requirement ¹		6
Arts requirement		3
ADDITIONAL BACCALAUREATE REQUIREMENTS (http://catalog.wcupa.edu/undergraduate/general-education-requirements/)		
University Requirements		
Writing Emphasis requirement ⁶		9
Speaking Emphasis requirement ⁷		9
Degree Requirements		
Capstone requirement		1-15
MAJOR REQUIREMENTS		
Major Core Courses ³		
CHE 103	General Chemistry I	3
CRL 103	General Chemistry I Lab	1
CHE 104	General Chemistry II	3
CRL 104	General Chemistry II Lab	1
CHE 231	Organic Chemistry I	4
CRL 231	Organic Chemistry I Lab	2
CHE 232	Organic Chemistry II	3
CRL 232	Organic Chemistry II Lab	2
CHE 321	Analytical Chemistry I	3
CRL 321	Analytical Chemistry I Lab	2
CHE 341	Physical Chemistry I	4
CRL 341	Physical Chemistry I Lab	2
CHE 409	Descriptive Inorganic Chemistry	3
CHE 418	Chemical Information	1
CHE 476	Biochemistry I	3
CHE 491	Seminar in Chemistry	1
Required Supporting Math & Science Coursework ³		
MAT 161	Calculus I ⁵	4
MAT 162	Calculus II	4
BIO 110	General Biology I ²	4
PHY 170	Physics I ²	4
PHY 180	Physics II	4
Lab safety exam must be passed before application for graduation. See advisor for more information		
Education Requirements		
EDF 300	Democracy and Education ⁵	3

EDP 280	Developmental and Psychological Perspectives in Education	3
EDA 103	Foundations of Special Education	3
EDA 303	Special Ed: Processes/Procedures for General Educators	2
EDR 347	Literacy Development and Secondary Students with Disabilities in Inclusive Classrooms	3
LAN/ENG 382	Teaching English Language Learners PK-12 ⁵	3
ERM 355	Ethical and Effective Assessment for Learning 7-12 ⁵	3
SED 100	An Exploration of Secondary Education	3
SED 200	Learning Environments and Field Experience in Secondary Schools	3
SED 300	Principles of Teaching and Technology in the Secondary Classroom	3
SED 360	Science Education in the Secondary School	3
Capstone Requirement		
SED 411	Student Teaching Sec - 1st Half ⁴	6
SED 412	Student Teaching Sec - 2nd Half ⁴	6
Total Minimum Credits Required		127

- ¹ Students in this program must take a LIT course
- ² PHY 170 and BIO 110 fulfill science general education requirements.
- ³ A grade of C- or better is necessary in all required science and mathematics courses.
- ⁴ This course fulfills the Capstone requirement.
- ⁵ Meets general education requirement
- ⁶ Writing Emphasis requirements satisfied by LIT 165, LNC 105/FLM 200 as Arts requirement and SED 300.
- ⁷ Speaking Emphasis requirements satisfied by SED 200, SED 411, and SED 412.
- ⁸ Ethics requirement satisfied by ERM 355.

Sample Course Plan

To track their individual degree progress, students are advised to access their Degree Progress Report (DPR) via myWCU regularly. For more information, visit wcupa.edu/DegreeProgressReport (<http://wcupa.edu/degreeprogressreport/>).

The following is a sample suggested course sequence for this program; course offerings and availability are not guaranteed. Students should consult their academic advisor with any questions.

Course	Title	Credits
Year One		
Semester One		
CHE 103 & CRL 103	General Chemistry I and General Chemistry I Lab	4
MAT 161	Calculus I	4
WRT 120	Effective Writing I	3
FYE 100X	First Year Experience	4
Credits		15
Semester Two		
CHE 104 & CRL 104	General Chemistry II and General Chemistry II Lab	4
MAT 162	Calculus II	4
SED 100	An Exploration of Secondary Education	3
EDP 280	Developmental and Psychological Perspectives in Education	3

WRT 2XX	200-Level WRT Course	3
Credits		17
Year Two		
Semester Three		
CHE 231 & CRL 231	Organic Chemistry I and Organic Chemistry I Lab	6
CHE 321 & CRL 321	Analytical Chemistry I and Analytical Chemistry I Lab	5
PHY 170	Physics I	4
EDA 103	Foundations of Special Education	3
Credits		18
Semester Four		
CHE 232 & CRL 232	Organic Chemistry II and Organic Chemistry II Lab	5
PHY 180	Physics II	4
SED 200	Learning Environments and Field Experience in Secondary Schools	3
EDA 303	Special Ed: Processes/Procedures for General Educators	2
LNC 105 or FLM 200	Global Science Fiction or Introduction to Film	3
Credits		17
Year Three		
Semester Five		
CHE 341 & CRL 341	Physical Chemistry I and Physical Chemistry I Lab	6
CHE 418	Chemical Information	1
BIO 110	General Biology I	4
EDF 300	Democracy and Education	3
LIT 165	Topics in Literature	3
Credits		17
Semester Six		
CHE 476	Biochemistry I	3
SED 300	Principles of Teaching and Technology in the Secondary Classroom	3
ERM 355	Ethical and Effective Assessment for Learning 7-12	3
LAN 382 or ENG 382	Teaching English Language Learners PK-12 or Teaching English Language Learners PK-12	3
Behavioral & Social Science Gen Ed		3
Credits		15
Year Four		
Semester Seven		
CHE 409	Descriptive Inorganic Chemistry	3
CHE 491	Seminar in Chemistry	1
SED 360	Science Education in the Secondary School ¹	3
EDR 347	Literacy Development and Secondary Students with Disabilities in Inclusive Classrooms	3
Humanities Gen Ed		3
Arts Gen Ed		3
Credits		16
Semester Eight		
SED 411	Student Teaching Sec - 1st Half ¹	6

SED 412	Student Teaching Sec - 2nd Half ¹	6
Credits		12
Total Credits		127

¹ Field course. Clearances required.