

B.S.ED. IN BIOLOGY

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		3
Distributed Disciplinary Foundations		
Science requirement		6-8
Science requirements are met by CHE 103 and PHY 130		
Behavioral & Social Science requirement		6
Humanities requirement		6
Arts requirement		3
ADDITIONAL BACCALAUREATE REQUIREMENTS (http://catalog.wcupa.edu/undergraduate/general-education-requirements/)		
University Requirements		
Writing Emphasis requirement		9
Speaking Emphasis requirement		9
Degree Requirements		
Capstone requirement		1-15
MAJOR REQUIREMENTS		
Education Requirements ²		
EDF 300	Democracy and Education	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
ENG/LAN 382	Teaching English Language Learners PK-12	3
ERM 355	Ethical and Effective Assessment for Learning 7-12	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
Required Courses ¹		
BIO 110	General Biology I	4
BIO 111	General Biology II	4
BIO 210	Genetics	3
BIO 210L	Genetics Lab	1
BIO 211	Cell Biology	4

BIO 214	General Microbiology	4
BIO 270	Ecology	3
BIO 412	Organic Evolution	3

Biology Elective

Selected from courses at or above the 300 level, except BIO 307 and BIO 469.

Required Supporting Math & Science Coursework¹

MAT 121	Introduction to Statistics I	3
or MAT 125	Introduction to Statistics and Probability	
MAT 143	Brief Calculus	3
or MAT 161	Calculus I	
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
PHY 130	General Physics I	4
ESS 101	Introduction to Geology	3

Capstone Requirement

SED 411	Student Teaching Sec - 1st Half ³	6
SED 412	Student Teaching Sec - 2nd Half ³	6

Total Minimum Credits Required 128/129

¹ Courses must be passed with a grade of C - or better.

² Students applying for teacher candidacy must have a 2.80 GPA.

Students formally admitted must graduate with a 3.0 GPA.

³ This course fulfills the Capstone requirement.

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		
BIO 110	General Biology I	4
CHE 103 & CRL 103	General Chemistry I and General Chemistry I Lab	4
MAT 121 or MAT 125	Introduction to Statistics I or Introduction to Statistics and Probability	3
FYE 100X	First Year Experience	4
Credits		15
Semester Two		
BIO 111	General Biology II	4
CHE 104 & CRL 104	General Chemistry II and General Chemistry II Lab	4
SED 100	An Exploration of Secondary Education	3
EDP 280	Developmental and Psychological Perspectives in Education	3
WRT 120	Effective Writing I	3
Credits		17

Year Two		
Semester Three		
BIO 214	General Microbiology	4
CHE 231 & CRL 231	Organic Chemistry I and Organic Chemistry I Lab	6
EDA 103	Foundations of Special Education	3
WRT 2XX	200-Level WRT Course	3
Credits		16
Semester Four		
BIO 210 & 210L	Genetics and Genetics Lab	4
MAT 143 or MAT 145 or MAT 161	Brief Calculus or Calculus for the Life Sciences or Calculus I	3-4
SED 200	Learning Environments and Field Experience in Secondary Schools	3
EDA 303	Special Ed: Processes/Procedures for General Educators	2
Credits		12-13
Year Three		
Semester Five		
BIO 211	Cell Biology	4
PHY 130 or PHY 170	General Physics I or Physics I	4
EDF 300	Democracy and Education	3
LIT 165	Topics in Literature	3
Humanities Gen Ed		3
Credits		17
Semester Six		
BIO 270	Ecology	3
BIO 412	Organic Evolution	3
SED 300	Principles of Teaching and Technology in the Secondary Classroom	3
ERM 355	Ethical and Effective Assessment for Learning 7-12	3
Behavioral & Social Science Gen Ed		3
Behavioral & Social Science Gen Ed		3
Credits		18
Year Four		
Semester Seven		
ESS 101	Introduction to Geology	3
SED 360	Science Education in the Secondary School	3
LAN 382 or ENG 382	Teaching English Language Learners PK-12 or Teaching English Language Learners PK-12	3
EDR 347	Literacy Development and Secondary Students with Disabilities in Inclusive Classrooms	3
BIO XXX	Biology Elective ¹	3
Arts Gen Ed		3
Credits		18
Semester Eight		
SED 411	Student Teaching Sec - 1st Half ²	6

SED 412	Student Teaching Sec - 2nd Half ²	6
Credits		12
Total Credits		125-126

¹ 300 level or above (except BIO 469)

² Field course. Clearances required.