

Summary of Biology Teacher Education Program

Suggested Course Sequence

Biology Major

Major requirements	27 hrs
Major electives	5 hrs
Major Supporting Courses	23-29 hrs
Professional Studies Courses	33 hrs
Required Minor (Secondary Education Minor from above)	
General Education	40 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	128-134 hrs

Freshman Year

	Hours
Fall Semester	
BIO 200 Biological Concepts	3
ENG 111 Freshman Composition I	3
OR 100 Freshman Year Experience	1
MTH 111 College Algebra	3
General Education/Electives	5
Spring Semester	
BIO 201 Zoology	4
ENG 112 Freshman Composition II	3
PSY 111 General Psychology	3
TH 120 Fundamentals of Speech or	
MAC 140 Introduction to Communication	3
General Education/Electives	3

Sophomore Year

	Hours
Fall Semester	
BIO 202 Botany	4
CHE 111/113 General Chemistry I and Lab	4
CHE 109 Technical Writing & Lab Safety	1
CIS 100 Computer Concepts & Applications	3
ED 102 Introduction to Education	3
ENG 170 Introduction to Literature	3
Spring Semester	
BIO 321 Microbiology	5
CHE 112/114 General Chemistry II and Lab	5
ED 210 Basic Concepts & Philosophy of Education	3
General Education/Electives	3

Junior Year

	Hours
Fall Semester	
BIO 341 Ecology	4
BIO Elective	3-4
ED 300 Human Development and Learning Theory	3
ED 310 Instructional Technology	3
GEO 105/106 Introduction to Earth Science and Lab	4
Spring Semester	
BIO Electives	6
ED 325 The Exceptional Child	3
PHY 131 Conceptual Physics	3
MTH 130 Elementary Statistics or	
PSY 361 Social Statistics	3
General Education/Electives	3

Senior Year

	Hours
Fall Semester	
BIO 450 Methods of Science Teaching	3
BIO 475 Human Physiology	4
ED 390 Assessment & Instructional Strategies	3
ED 416 Curriculum & Methodology	3
General Education/Electives	3
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



Biology Major-B.S. with Teacher Certification

According to current state guidelines, there is only one pathway to teacher certification in Biology. That pathway requires the completion of a major in biology with specified courses. Additionally, a student in this program must complete the teacher education program specified elsewhere. At the present time, a minor in biology is not granted teacher certification by the state of Kentucky. A student who wants to teach biology at the secondary (8-12) level should pursue a major in biology. A program for middle school science certification with an emphasis in science is also available.

MAJOR REQUIREMENTS 27 hrs

BIO 200 Biological Concepts	3
BIO 201 Zoology (with lab)	4
BIO 202 Botany (with lab)	4
BIO 321 Microbiology	5
BIO 341 Ecology	4
BIO 450 Methods of Science Teaching	3
BIO 475 Human Physiology	4

MAJOR ELECTIVES 5 hrs

BIO 215 Winter Botany	2
BIO 216 Spring Flora	2
BIO 300 Paleontology	3
BIO 315 Research Methods	2
BIO 317 Plant Taxonomy	3
BIO 320 Immunology	3
BIO 332 Entomology	3
BIO 342 Field Studies in Biology	1-3
BIO 344 Genetics	4
BIO 348 Medical Terminology	3
BIO 362 Comparative Vertebrate Anatomy	5
BIO 400 Special Topics	3
BIO 410 Cell Biology	3
BIO 415 Aquatic Biology	4
BIO 422 Animal Physiology	4
BIO 441 Principles of Biological Conservation	3
BIO 480 Senior Seminar	1-2
BIO 490 Senior Research	1-2

SUPPORTING COURSES 23-29 hrs

<i>Chemistry</i> 10 hrs	
CHE 109 Technical Writing & Lab Safety	1
CHE 111 General Chemistry I	3
CHE 113 General Chemistry I Lab	1
CHE 112 General Chemistry II	3
CHE 114 General Chemistry II Lab	2
<i>Earth/Space Science</i> 4 hrs	
GEO 105 Intro. to Earth Science	3
GEO 106 Intro. to Earth Science Lab	1

<i>Physics</i> 3-8 hrs	
PHY 131 Conceptual Physics or	3
PHY 141/143 General College Physics I (with lab)	4
PHY 142/144 General College Physics II (with lab)	4

<i>Math</i> 3-4 hrs	
MTH 110 College Mathematics or	3
MTH 111 College Algebra or	3
MTH 123 Elementary Calculus or	3
MTH 210 Analytics & Calculus I	4

<i>Statistics</i> 3 hrs	
MTH 130 Elementary Statistics or	3
PSY 361 Social Statistics	3

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.