



**BACHELOR of SCIENCE in Science and Math Education with Concentration in Biology**

School of Teacher Education

College of Education and Behavioral Sciences

Western Kentucky University

The suggested program of study shown below should be used in consultation with your advisor(s). Every student will finish with a unique plan of his/her own depending on the electives selected.

**Success Markers**

**SAMPLE - 4 year plan**

<b>FIRST YEAR</b>	<b>Fall Semester</b>		<b>Spring Semester</b>	
	BIO 120/121 Biological Concepts: Cell Metabolism & Genetics and LAB (E-NS, SL)	4	BIO 122/123 Biological Concepts: Evolution, Diversity, & Ecology	4
	MATH 116 College Algebra (F-QR)	3	MATH 117 Trigonometry	3
	ENG 100 Intro to College Writing (F-W1)	3	CHEM 120 College Chemistry (E-NS)	4
	HIST 101 World History I OR HIST 102 World History II (F-SB)	3	CHEM 121 Chem Lab	1
	SMED 101 Step 1: Intro to Inquiry Based Teaching (E-SB)	1	Intro to Public Speaking (F-OC)	3
	General Elective	1	SMED 102 Step 2: Intro to Inquiry Based Lesson Design	2
	<b>TOTAL CREDIT HOURS</b>	<b>15</b>	<b>TOTAL CREDIT HOURS</b>	<b>17</b>

<b>SECOND YEAR</b>	<b>Fall Semester</b>		<b>Spring Semester</b>	
	BIO 222/223 Plant Bio & Diversity or BIO 224/225 Animal Bio & Diversity OR BIO 226/227 Microbial Bio & Diversity	4	BIO 319/322 Intro to Molecular & Cell Biology & Lab OR BIO 327/337 Genetics & Lab	4
	PHYS 231/232 Intro to Physics & Biophysics & Lab (4 hrs) OR PHYS 255/256 University Physics I & Lab (5 hrs)	4	BIO Support Course (see advisor)	3
	World Language (if needed) or General Elective	0-3	World Language (if needed) OR General Elective	0-3
	SMED 310 Knowing & Learning	3	Intro to Literature Studies (F-AH)	3
	Arts & Humanities (E-AH)	3	SMED 320 Classroom Interactions	3
	<b>TOTAL CREDIT HOURS</b>	<b>14</b>	<b>TOTAL CREDIT HOURS</b>	<b>13</b>

**World Language Proficiency:** All students entering in Fall 2014 or later must demonstrate proficiency in a world language at the Novice High level before completing 60 credit hours. Novice high is the ability to communicate in writing and speaking on familiar topics in simple sentences. To meet this requirement, students may take college language courses or take a proficiency test. For more information go to

[www.wku.edu/modernlanguages/placement/](http://www.wku.edu/modernlanguages/placement/).

**Colonnade Program:** All students entering in fall 2014 or later must complete 39 hours in 13 specific Colonnade areas. Colonnade areas are listed in parentheses marked in blue after the corresponding classes. Some areas may have specific course requirements while others can be chosen from selected lists of options. For more details and to see lists of options, go to [http://www.wku.edu/colonnade/documents/approved\\_colonnade\\_courses\\_website.pdf](http://www.wku.edu/colonnade/documents/approved_colonnade_courses_website.pdf)

THIRD YEAR	Fall Semester		Spring Semester	
	BIO 315 Ecology <b>OR</b> BIO 316 Evolution: Theory & Process	3	Connections: Social & Cultural (K-SC)	3
	Writing in the Disciplines (F-W2)	3	BIO Elective, 300 or above	3
	BIO Elective, 300 or above	3	BIO Support Course (see advisor)	3
	SMED 340 Perspectives on Science and Mathematics	3	Connections: Local to Global (K-LG)	3
	SPED 330 Intro to Exceptional Education: Diversity in Learning	3	BIO Elective, 300 above	3
			SMED 360 Research Methods for Science and Math Teachers	3
	<b>TOTAL CREDIT HOURS</b>	<b>15</b>	<b>TOTAL CREDIT HOURS</b>	<b>18</b>

FOURTH YEAR	Fall Semester		Spring Semester	
	Connections: Systems (K-SY)	3	SEC 490 Student Teaching	10
	BIO Elective, 300 or above	3	SMED 489 Student Teaching Seminar	3
	BIO Elective, 300 or above	3		
	BIO Elective, 300 or above	3		
	SMED 470 Project Based Instruction	3		
	<b>TOTAL CREDIT HOURS</b>	<b>15</b>	<b>TOTAL CREDIT HOURS</b>	<b>13</b>

**Total Credit Hours: 120**

\* Denotes prerequisite courses before program admission  
Student must receive a "C" or better in each PROFESSIONAL EDUCATION COURSE.

Students must register, pay, and pass Praxis II exams during this fall semester prior to student teaching. Tests are given by the ETS during November in the fall. Check the EPSB website for specific tests for your areas of certification. Students cannot be recommended for certification until all Praxis II exams required receive passing scores.

**For more Information:**

**Department:** School of Teacher Education

**Phone:** 270-745-5414

**Website:** [www.wku.edu/ste](http://www.wku.edu/ste)

Course Descriptions: <http://www.wku.edu/undergraduatecatalog/>

**For more Information:**

**Department:** Biology

**Phone:** 270-745-3696

**Website:** [www.wku.edu/biology](http://www.wku.edu/biology)

Course Descriptions: <http://www.wku.edu/undergraduatecatalog/>