

## **B.S. in Biology Education Program Worksheet**

### **BIOLOGY – LOWER LEVEL CORE CURRICULUM (62 hours)**

Course Taken	Course	Course Title	Prerequisite(s)	Credits
<b><u>Area A – Essential Skills (9)</u></b>				
	ENGL 1101	English Composition I	ENGL 0098, unless exempt READ 0098, unless exempt	3
	ENGL 1102	English Composition II	ENGL 1101 with a grade of C or better	3
	MATH 1113*	Precalculus Mathematics	MATH 1111, or one year of high school math above Algebra II	3
*Math 2253 may be used if the student meets the prerequisites.				
<b><u>Area B – Institutional Options (4)</u></b>				
	COMM 1110	Fundamentals of Speech		3
	Area B Elective	Choose from courses listed		1
<b><u>Area C – Humanities/Fine Arts (6)</u></b>				
	Area C Electives	Choose from courses listed		6
<b><u>Area D – Science/Mathematics/Technology (12)</u></b>				
	MATH 2253	Calculus & Analytical Geometry I	MATH 1113	4
	CHEM 1211K	Principles of Chemistry I	MATH 1111 with a grade of C or above	4
	CHEM 1212K	Principles of Chemistry II	CHEM 1211K	4
<b><u>Area E – Social Sciences (12)</u></b>				
	HIST 2111 or 2112	United States History	READ 0098, unless exempt	3
	POLS 1101	American Government	READ 0098, unless exempt	3
	Area E Elective*	Choose from courses listed		6
<b><u>Area F – Major Related (18)</u></b>				
	BIOL 1107K	Principles of Biology I	READ 0098, unless exempt	4
	BIOL 1108K	Principles of Biology II	BIOL 1107K	4
	CHEM 2211K	Organic Chemistry I	CHEM 1212K	4
	CHEM 2212K	Organic Chemistry II	CHEM 2211K	4
	BIOL 2270	Ethical Issues in Science	BIOL 1108K	2
<b><u>Physical Education (1)</u></b>				
	PHED	Activity Elective		1

\* PSYC 1101 is recommended for students in the B.S in Biology Education Program because it is a pre-requisite for EDUC 2110, EDUC 2120 and EDUC 2130.

AREA	ELECTIVE LIST
B	BIOL 1001, COMM 1120, ENGL 1105, 1110, HIST 1050, 1051, HUMN 1000, 1100, PHED 1030, SOCI 1000
C	ENGL 1201, 2111, 2112, 2120, 2121, 2130, 2131; HUMN 1201 or MUSC 1100 or THEA 1100
E	ANTH 1103, ECON 2105, 2106, GEOG 1100, 1101, 1111, HIST 1111, 1112, 2111, 2112, PHIL 1101, 1102, 1103, POLS 2101, 2201, 2301, 2401, PSYC 1101, 2101, 2103, 2204, 2250, SOCI 1101, 1160

**UPPER LEVEL CORE CURRICULUM (27- 28 hours)**

Course Taken	Course	Course Title	Prerequisite(s)	Credits
<b><u>REQUIRED (20)</u></b>				
	MATH 2200	Introduction to Statistics	MATH 1111	3
	BIOL 3200K	Cellular Biology	BIOL 1108K, coreq CHEM 1211K	4
	BIOL 3500K	Ecology	BIOL 1108K, CHEM 1211K	4
	BIOL 4250	Evolution	BIOL 3400K, CHEM 1212K	3
	BIOL 3400K	Genetics	BIOL 3200K, CHEM 1212K, coreq. CHEM 2211K	4
	BIOL 4000	Senior Seminar	19 hours 3000/4000 level BIOL courses	2
<b><u>ELECTIVES (7 - 8) Must include at least one 4 credit biology course.</u></b>				
	BIOL 3510K	Plant Biology	BIOL 1108K, CHEM 1211K	4
	BIOL 4360K	Comparative Anatomy and Physiology of Vertebrates	BIOL 1108K, CHEM 1211K	4
	BIOL 3520K	Invertebrate Zoology	BIOL 1108K	4
	BIOL 3340K	General Microbiology	BIOL 1108K, CHEM 1211	4
	BIOL 3300K	Developmental Biology	BIOL 3200K	4
	BIOL 4410K	Molecular Biology	CHEM 2212K, BIOL 3400K	4
	BIOL 4500K	Biotechnology	BIOL 3400K	4
	BIOL 4900	Special Topics in Biology	BIOL 3400K and 3 additional upper level Biology courses	3
	CHEM 3311K	Quantitative Analysis	CHEM 1212K, MATH 1113	4
	CHEM 3500K	Biochemistry	CHEM 2212K, BIOL 1108K	3
	CHEM 4430	Advanced Organic Chemistry	CHEM 2212K	3

**EDUCATION COURSES (36 hours)**

Course Taken	Course	Course Title	Prerequisite(s)	Credits
	Students must be admitted to the Education Program prior to taking upper division (3000-4000) education courses.			
	EDUC 2110C	Investigating Critical and Contemporary Issues in Education		3
	EDUC 2120	Exploring Socio-Cultural Perspectives on Diversity in Educational Contexts		3
	EDUC 2130	Exploring Teaching and Learning		3
	EDUC 3120	Teaching Secondary Students Who Are Exceptional, Diverse, and At-Risk	Admission to Teacher Education	3
	EDUC 3272	Classroom Management in Secondary Education/Field Experience I	Admission to Teacher Education	2
	EDUC 3273	Classroom Management in Secondary Education/Field Experience II	Admission to Teacher Education	2
	EDUC 3274	Classroom Management in Secondary Education/Field Experience III	Admission to Teacher Education	2
	EDUC 3902	Curriculum and Assessment for Secondary Math/Science Teachers	Admission to Teacher Education	3
	EDUC 4901	Methods and Strategies for Secondary Math/Science Teachers	Admission to Teacher Education	3
	EDUC 4952	Internship		8
	EDUC 4953	Senior Seminar		1
	READ 3456	Reading Across the Curriculum for Secondary Teachers	Admission to Teacher Education	3

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