

Appendix II: Degree Program overview and four year plan (127 credits)

Overview of the Program

The overall number of credits required to complete the B.A. degree program is 127 - 130 depending on the number of Language courses taken.

There are 63 credits (17 courses) required for the Biology portion of the degree with following breakdown of courses by discipline/area:

- Biology: 28 credits
- Chemistry: 13 credits
- Mathematics: 8 credits
- Physics: 8 credits
- Earth/Space Science: 6 credits

There are 33 credits (9 courses) required for the Education portion of the degree. In addition, PSYC 100 (4 cr) and PSCH 210 (3 cr) are required and are also used as GEP Social Science electives.

General Education Program (GEP) courses required for all B.A. degree students:

- Two Global Culture GEP courses (C)
- Three Arts and Humanities GEP courses in at least two academic fields (AH)
- Three Social Sciences GEP courses in at least two academic fields (SS)

Additional UMBC requirements:

- ENGL 100
- One Writing Intensive course (WI; satisfied by EDUC 411)
- Two Physical Education courses (non-academic)

The proposed program includes at least one semester each of chemistry, physics, earth science, and math, in keeping with the recommendations of the National Science Teachers Association (NSTA) for secondary school certification in Biology. In the final semester the full semester load is devoted to the internship.

Four year plan for completion of the B.A. in Biology Education (next page)

Fall, First Year (16.5 credits)	Spring, First Year (15.5 credits)
MATH 155 Elementary Calculus [4]	CHEM 101 Principles of Chemistry I [4]
BIOL 141 Foundations of Biology I [4]	BIOL 142 Foundations of Biology II [4]
<i>PE Elective [1.5]</i>	<i>PE Elective [1.5]</i>
PSYC 100 <i>Introduction to Psychology (SS) [4]</i>	GES 110 <i>Physical Geography [3]</i>
<i>ENGL 100</i> <i>Composition [3]</i>	<i>Arts & Humanities Elective I [3]</i>

Fall, Second year (17 credits)	Spring, Second year (17 credits)
BIOL 302 Molecular and General Genetics [4]	BIOL 303 Cell Biology [4]
CHEM 102 Principles of Chemistry II [4]	PHYS 111 Basic Physics I [4]
PSYC 210 <i>Psychology of Learning [3] (SS)</i>	CHEM 102L Principles of Chemistry II Lab [2]
EDUC 310 Inquiry into Education. [3]	EDUC 311 Psychological Foundations of Education [3]
<i>Arts & Humanities Elective II [3]</i>	<i>Culture Elective I [3]</i>
	BIOL 397 Ethics and Integrity in Scientific Research [1]

Fall, Third year (16 credits)	Spring, Third year (16 credits)
BIOL 300L Experimental Biology Lab [2]	BIOL 305 Comparative Animal Physiology [3]
PHYS 112 Basic Physics II [4]	BIOL 4XX elective [4]
CHEM 351 Organic Chemistry I [3]	EDUC 388 Inclusion and Instruction [3]
STAT 350 Statistics with Applications in Biological Sci. [4]	EDUC 410 Teaching Reading in the Content Area I [3]
EDUC 412 Analysis of Teaching and Learning [3]	<i>Culture Elective II [3]</i>

Fall, Fourth year (17 credits)	Spring, Fourth year (12 credits)
BIOL 302L Molecular and General Genetics Lab [2]	EDUC 456 Student Teaching in Secondary Schools [10]
GES 311 <i>Weather and Climate [3]</i>	EDUC 457 Secondary Internship Seminar [2]
<i>Arts & Humanities Elective III [3]</i>	
<i>Social Science Elective (not PSYC) [3]</i>	
EDUC 427 Science in the Secondary School [3]	
EDUC 411 Teaching Reading in the Content Area II [3]	