

Undergraduate Secondary Social Studies Teacher Education Certificate Requirements

Biology

Candidate: _____

Campus ID: _____

<i>All Courses Must be Completed with a C or Better</i>					
BIOL		Semester	Grade	PROFESSIONAL EDUCATION REQUIREMENTS:	
BIOL 141 – Foundations of Biology: Cells, Energy, Organisms AND				<i>A GPA of 2.75 is required for official program entry. A GPA of 3.0 is required for entering internship. Students must attain a B or better in all required education courses at the 400 level.</i>	
BIOL 142 – Foundations of Biology: Ecology & Evolution					
BIOL 302 – Molecular & General Genetics				EDUC 310 Inquiry into Education (3)	
BIOL 303 – Cell Biology				EDUC 311 Psychological Foundations of Education (3)	
BIOL 300L – Experimental Biology Laboratory				EDUC 388 Inclusion and Instruction (3)	
BIOL 302L - Molecular and General Genetics Lab				EDUC 412 Analysis of Teaching and Learning (3)	
BIOL 397 - Ethics and Integrity in Scientific Research				EDUC 410 Literacy in the Content Area I (3)	
BIOL 3XX – choose BIOL 304, BIOL 305, BIOL 307, or BIOL 375					
BIOL 4XX - level elective					
OTHER STEM COURSES				PHASE I INTERNSHIP SEMESTER (Fall Only)*	
CHEM 101 - Principles of Chemistry I AND				EDUC 411 Literacy in the Content Area II (3)	
CHEM 102 - Principles of Chemistry II				EDUC 427 Science in the Secondary School (3)	
CHEM 102L - Introductory Chemistry Laboratory I				EDUC 448 Phase I Internship & Seminar (1)	
CHEM 351 - Organic Chemistry I					
MATH 155 Elementary Calculus OR MATH 151 Calculus and Analytical Geometry					
PHYS 111 Basic Physics I (or PHYS 121) AND PHYS 112 Basic Physics II (or PHYS 122)				PHASE II INTERNSHIP SEMESTER (Spring Only)*	
STAT 350 Statistics with Applications in the Biological Sciences				EDUC 456 Internship in Education (10)	
EDUC 457 Internship Seminar in Secondary Education (2)					
NSTA RECOMMENDED					
GES 110 Physical Geography				<i>*See https://education.umbc.edu/internship/ for internship requirements.</i>	
GES 311 Weather and Climate					
PSYC 100 Introduction to Psychology (SS GEP)					
PSYC 210 Psychology of Learning (SS GEP)					

Information about Praxis Test Requirements: <https://www.ets.org/praxis/md/test-takers/plan-your-test/certification.html>