



Department of Education
INTEGRATED SCIENCE TEACHER EDUCATION
AYA MAJOR/BIOLOGY MINOR

Program Outline
 For Students Under the 2023-2024 BW Catalog

Degree Earned: Bachelor of Science in Education (BSEd)
 License Earned: Integrated Science, 132010
 OAE Exams: 003 Assessment of Professional Knowledge: Adolescence to Young Adult (7-12); 024 Integrated Science
 GPA Requirements for Graduation: 2.800 Cumulative, 2.800 in EDU Courses, 2.600 in required courses for Integrated Science Program

Name _____ ID# _____ Advisor _____

Courses marked with # fulfill the BIO minor requirements.
 BIO minor requires 17 credits which must include BIO 121, BIO 122.

Course #	Course Title	Hours	Advising Notes (Note: Unless otherwise noted, course is offered in Fall and Spring)
Required Courses in Astronomy			
AST 121	Astronomy of the Solar System	3	
AST 170	Observational Astronomy Lab <i>Prerequisite or Corequisite: AST 111 or AST 121 or Equivalent</i>	1	
Required Courses in Biology:			
BIO 121#	Principles of Biology I	4	
BIO 122#	Principles of Biology II	4	
BIO 211#	Genetics <i>Prerequisites: "C-" or better in BIO 121 and BIO 122</i>	4	Offered Fall Only
BIO 263#	Sophomore Biology Seminar <i>Prerequisites: "C-" or better in BIO 121 and BIO 122</i>	1	
BIO 313#	Ecology <i>Prerequisites: ENG 131, BIO 121, and BIO 122</i>	4	Offered Fall Only
Required Courses in Chemistry:			
CHM 111	General Chemistry I	4	
CHM 112	General Chemistry II <i>Prerequisite: CHM 111</i>	3	
CHM 115	General Chemistry Laboratory <i>Prerequisite: CHM 111; Corequisite: CHM 112</i>	1	
CHM 251	Organic Chemistry I <i>Prerequisite: CHM 112 and CHM 115 or permission of the instructor; Corequisite: CHM 255</i>	3	Offered Fall Only
CHM 255	Organic Chemistry I Laboratory <i>Prerequisite: Corequisite: CHM 251</i>	0.5	Offered Fall Minimester B Only
Required Courses in Geology:			
GEO 111	The Dynamic Earth	4	

Required Courses in Physics:			
PHY 131	Physics for Scientists and Engineers I <i>Prerequisite(s): Four years of high school mathematics, including trigonometry, or MTH 140. Corequisite(s): Except by permission of the instructor, PHY 151 is to be taken concurrently with PHY 131</i>	4	Offered Spring Only
PHY 132	Physics for Scientists and Engineers II <i>Prerequisite(s): Four years of high school mathematics, including trigonometry, or MTH 140. Corequisite(s): Except by permission of the instructor, PHY 152 is to be taken concurrently with PHY 132.</i>	4	Offered Fall Only
PHY 151	Introductory Physics Lab I <i>Must be taken concurrently with PHY 131 unless given permission of instructor</i>	1	Offered Spring Only
PHY 152	Introductory Physics Lab II <i>Must be taken concurrently with PHY 132 unless given permission of instructor</i>	1	Offered Fall Only