

COURSE OF STUDY
Muskingum University
AYA Integrated Science/7-12
Biology Major

Academic Year: 2025-2026

Student Name: _____

Education candidates are required to earn a B- or better in all EDUC courses to move forward in the program. Additionally, education candidates are required to complete all hours and assignments in the EDUC 201 and 301 practicum courses to move forward in the program. Each practicum course is 1 credit hour. Practicum courses fulfill the field hours required by the Ohio Department of Higher Education to complete licensure.

Pre-Admission Courses

Course #	Course Name	Credit Hours	Term Planned	Grade	Final Audit
EDUC 110	Introduction to Education	1			
EDUC 112	Educational Implications of Diversity (pre-co requisite EDUC 110)	3			
EDUC 101	Introductory Field Practicum 101 (co-requisite EDUC 112)	1			
EDUC 215	Educational Psychology	3			

Non-practicum Courses (Admission to Education Program Required)

Course #	Course Name	Credit Hours	Term Planned	Grade	Final Audit
EDUC 335	Educational Technology	3			
EDUC 341	Assessment in Education (pre-requisite EDUC 313) (pre-co requisite EDUC 330)	3			

Practicum 201 Courses – General Methods Courses

Course #	Course Name	Credit Hours	Term Planned	Grade	Final Audit
EDUC 313	Curriculum and Instruction for the Adolescent (offered only in fall) (EDUC 201 co-requisite)	3			
EDUC 330	Serving Individuals with Exceptionalities (offered only in fall) (EDUC 201 co-requisite)	3			
EDUC 375	Professional Practices in AYA Education (co-requisite EDUC 201)	3			
EDUC 201	Intermediate Field Practicum SP___ FA___ SP___ FA___ SP___ FA___ TOTAL___				

Practicum 301 Courses – Content Method Courses

Course #	Course Name	Credit Hours	Term Planned	Grade	Final Audit
EDUC 384	Integrated Science Methods for Middle Childhood and AYA educators (pre-requisite EDUC 313) (offered only in odd spring) (EDUC 301 co-requisite)	3			
EDUC 413	Reading in the Content Areas (pre-requisite EDUC 313, or EDUC 370, EDUC 371) (EDUC 301 co-requisite)	3			
EDUC 301	Advanced Field Practicum SP___ FA___ SP___ FA___ SP___ FA___ TOTAL___				

Professional Semester

Course #	Course Name	Credit Hours	Term Planned	Grade	Final Audit
EDUC 418	Professional Practices in Teacher Education	2			
EDUC 419	Co-Teaching and Collaboration in Education	2			
EDUC 420	Pro-Active Approaches to Classroom Management and Support	2			
EDUC 451	Student Teaching in the Secondary Schools	9			
EDUC 461	Student Teaching Seminar	1			

Total Course Hours 45
Total Practicum Hours _____

All content area courses require a B- or better. Any course not meeting the grade of B- requires discussion with Education Advisor and Education Department Chair to determine further action.

Content Area Licensure Courses

Biology Major Requirements

Course #	Course Name	Credit Hours	Term Planned	Grade	Final Audit
BIOL 111	Organismal Biology I and	3			
BIOL 107	Biology Laboratory I (offered only Fall)	1			
BIOL 112	Organismal Biology II and	3			
BIOL 108	Biology Laboratory II (offered only in Spring)	1			
BIOL 121	Anatomy and Physiology I (offered only in Fall)	4			
BIOL elective	Choose one additional Biology Elective at any level	4			
BIOL elective	Choose one additional Biology Elective at any level	4			
BIOL 226	Introduction to Cell and Molecular Biology (pre-requisite BIOL 112/108, or 121 or 122) (offered only in Fall)	3			
BIOL 306	Genetics (pre-requisite BIOL 112/108, or 121 or 122) (offered only in Fall)	4			
BIOL 308	General Ecology (pre-requisite BIOL 111/107) (offered only in Fall)	4			
BIOL 336	Cellular Physiology (pre-requisite BIOL 112/108, 226, CHEM 111, 112) (offered only in SP)	4			
BIOL 420	Senior Seminar (offered only in Spring)	3			
MATH 140	Statistics (pre-requisite MATH 100 or MATH ACT 18 or MATH SAT 471)	3			
CHEM 111	General Chemistry I	4			
CHEM 112	General Chemistry II (offered only in Spring)	4			

Total Biology Major Hours 49

Additional Integrated Science Requirements

PHEN 115	Introductory Physics I (pre-requisite MATH 170 or higher; offered only in Fall)	4			
PHEN 116	Introductory Physics II (pre-requisite PHEN 115; offered only in Spring)	4			
PHEN 150	Introduction to Astronomy	3			
GEOL 101	Introduction to Geology	4			

Total Additional Science Hours 15

TOTAL HOURS