Course of Study

Muskingum University
Adolescent to Young Adult Education License
Physical Sciences: Chemistry
Grades 7 through 12

Academic Year: 2022-2023 Student's Name _____

Please note: The requirements for your academic major may be different than the following licensure. Please use your university catalog and work with both your academic and education co-advisors to ensure both your academic major and teacher licensure requirements are met.

Course	Credit Hours	Term Planned	Term Completed & Grade
Admission to the teacher education program is the prerequisite for all EDUC 300 and 400 level courses. Students seeking teacher licensure must complete the EDUC 300 and 400 level courses with a grade of B- or higher.			
Students must successfully complete all four (4) Practicum courses EDUC 101, 201, 301, 401 level before student teaching.			
EDUC 110: Introduction to Education or MUSIC 181 for Music Majors Only	1		
EDUC 112: Educational Implications of Diversity Co-requisite EDUC 101 Prerequisite or Co-requisite EDUC 110 or MUSC 181	3		Grade of C or higher
EDUC 215: Educational Psychology	3		
EDUC 330: Serving Individuals with Exceptionalities Prerequisite EDUC 110 or MUSIC 181 Co-requisite EDUC 201	3		
EDUC 335: Educational Technology Prerequisite EDUC 110 or MUSIC 181	3		
All students seeking Adolescent to Young Adult licensure must complete the following courses:			
EDUC 313: Curriculum and Instruction for the Adolescent Co-requisite EDUC 301 (Offered Only in Fall)	3		
EDUC 341: Assessment in Education Pre 0r Co-requisite EDUC 330	3		
EDUC 394: Integrated Science Methods for the Adolescent Prerequisite EDUC 313 Co-requisite EDUC 301 (Only Offered in Spring)	3		
EDUC 413: Reading in the Content Area Prerequisite EDUC 313 Co-requisite EDUC 401	3		
Professional Semester — EDUC 419: Co-teaching and Collaboration in Education	2		
Professional Semester — EDUC 420: Proactive Approaches to Classroom Management and Support	2		
Professional Semester — EDUC 451: Student Teaching in the Secondary Schools	9		
Professional Semester — EDUC 461: Student Teaching Seminar	1		
Professional Semester — EDUC 466: Professional Practices in Secondary Schools	2		
Total Education Hours	**41**		
			cont'd

*** Fieldwork across the preparation program must include experiences at both the middle school and high school levels.**

This page of content courses requires a grade of C- or higher to complete the Gateways for Traditional Undergraduate Initial Teacher Licensure Preparation Program.

Course	Credit Hours	Term Planned	Term Completed & Grade
Single Field Model – Chemistry Core Courses:			
CHEM 111: General Chemistry I (Offered Only in Fall)	4		
CHEM 112: General Chemistry II (Offered Only in Spring)	4		
CHEM 213: Organic Chemistry I (Offered Only in Fall) Prerequisite CHEM 112	4		
CHEM 214: Organic Chemistry II (Offered Only in Spring) Prerequisite CHEM 213	4		
CHEM 230: Foundational Inorganic Chemistry Prerequisite: CHEM 112	3		
CHEM 250: Professional Development of Chemistry Prerequisite CHEM 112	1		
CHEM 315: Physical Chemistry I (Offered Only in Fall) Prerequisite CHEM 112 Co-requisite MATH 200, PHEN 121	4		
CHEM 335: Analytical Chemistry (Offered Only In Fall) Prerequisite or Co-requisite CHEM 315	4		
CHEM 355: Advanced Laboratory in Chemistry (Offered Only in Spring) Prerequisite CHEM 214, 315	3		
CHEM 418: Biochemistry I Prerequisite: CHEM 214 (Offered Odd Years in Fall)	4		
CHEM 454: Chemistry Seminar and Literature Research Prerequisite CEM 250 Co-requisite CHEM 355	2		
CHEM 455: Chemistry Seminar and Laboratory Research (Inorganic Option – Spring Only) Prerequisite CHEM 355, 454	4		
PHEN 121: Classical Physics I Co-requisite MATH 190	4		
PHEN 122: Classical Physics II Co-requisite MATH 200	4		
BIOL 111: Organismal Biology and (Offered Only in Fall) Co-requisite BIOL 107 Laboratory I	3 1		
GEOL 101 Introduction to Geology or GEOL 110 Environmental Geology	4		
MATH 190: Calculus I Prerequisite 180 or ACT Math 24 or higher or SAT Math 576 or higher	4		
MATH 200: Calculus II Prerequisite MATH 190	4		
Total Science Hours	**65**		