



Secondary Education, Biology Curriculum Requirements – 7th-12th Grade Licensure

COURSES REQUIRED	HRS.	GRADE
MSU General Education Core Curriculum		
ENGLISH COMPOSITION—6 hours		
EN 1103 or equivalent (C or higher)	3	
EN 1113 or equivalent (C or higher)	3	
MATHEMATICS — 6 hours (See University Core)		
MA 1313 College Algebra or Higher (C or higher)	3	
MA 3123 Stats Inference	3	
HUMANITIES—6 hours		
(See University Core)	3	
(See University Core)	3	
SOCIAL SCIENCES—6 hours		
PSY 1013 General Psychology	3	
(See University Core)	3	
FINE ARTS—3 hours		
(See University Core)	3	
Biology Content Curriculum		
BIO 1134 Biology I	4	
BIO 1114 Biology II	4	
BIO 2103 Cell Biology	3	
BIO 3103 Genetics I	3	
BIO 3104 Ecology	4	
BIO 3304 General Microbiology	4	
BIO 4113 Evolution	3	
BCH 4013 Principles of Biochemistry	3	
CH 1213/1211 Chemistry I + Lab	4	
25 Hours of Electives		
(Science or Math Electives ONLY – may complete another science or math endorsement)		
For Physics Endorsement: 18 hours of PH coursework		
For Chemistry Endorsement: 18 hours of CH coursework		
For Physical Science Endorsement: 8 hrs of CH coursework (2 lecture + 2 labs) 6 hrs of PH coursework, includes labs		
For General Science Endorsement: 18 hrs in science prefix coursework. EX: Variety of PH, CH, BIO, GG coursework		
For Math Endorsement: <i>See required coursework on page 2</i>		
Teacher Education Curriculum - *before Phase II **Last Semester		
EDF 3333 Social Foundations of Education*	3	
EDX 3213 Foundations of Special Education*	3	
EDS 3413 Principles of Secondary Education*	3	
EPY 3143 Human Development and Learning Strategies in Education*	3	
RDG 3513 Developing Reading Strategies Secondary School Content Areas	3	
EDS 3653 Secondary Science Education (<i>Take before EDS 4653</i>) [Spring Only]	3	
EDS 4653 Methods of Teaching Science (<i>Take after EDS 3653</i>) [Fall Only]	3	
EDS 4873 Seminar in Managing the Secondary Classroom (<i>Take with EDS 4653</i>)	3	
EDS 4403 Evaluation of Learning in Secondary Schools**	15	
EDS 4886 Teaching Internship in Secondary Education**		
EDS 4896 Teaching Internship in Secondary Education**		



Secondary Math Endorsement Requirements		
MA 1713 Calculus I	3	
MA 1723 Calculus II	3	
MA 3113 Intro to Linear Algebra	3	
MA 3123 Intro to Stats Inference	3	
MA 3053 Foundations of Mathematics	3	
MA 3463 Foundations of Geometry	3	
EDS 3633 Secondary Mathematics Education <i>[Spring Only]</i>	3	

Phase I – Declaring your major in Elementary, Secondary or Special Education

Phase I identifies teacher candidates who have declared a major in Elementary, Secondary or Special Education prior to official admission into Teacher Education (Phase II). Students must have an overall GPA of 2.5 to transfer, or in order to change their major to Elementary, Secondary or Special Education.

Phase II: Admission to Teacher Education Requirements:

See advisor to apply for admission to teacher education.

Students must have the following qualifications before being admitted to Phase II

- Minimum 2.75 GPA on 44 hours of the MSU general education core and cumulative GPA of 2.5
- Test scores: ACT 21 composite (equivalent SAT) **or** Praxis Core Academic Skills for Educators scores: 156 reading (5713), 162 writing (5723), 130 mathematics (5733) **or** 3.0 GPA on 60 hours

Once students are ready for Phase II, they will be admitted to the Admission to Teacher Education Canvas course to submit the following items:

- Background check
- Two recommendation forms from educators
- Verification of 40 hours of work experience with children or youth
- Signed Dispositions form
- Proof of liability insurance
- Licensure information form
- Purchase a subscription to Taskstream by Watermark

All forms and instructions on how to complete the information above are in the Canvas course, and all items will be submitted digitally in Canvas.

Phase III: Teaching Internship Requirements:

- Completion of all professional education courses with a C or higher in each course
- Minimum overall 2.5 GPA
- Applications for internship are due during the semester before internship. The Office of Clinical/Field-Based Instruction, Licensure and Outreach will reach out to the students to prep them for Phase III.
- Take the Praxis Subject Assessment and the Praxis Principles of Learning and Teaching (PLT) prior to internship

Phase IV: Graduation Requirements:

- Completion of at least 124 hours with the last 25% of hours earned at MSU
- No more than 61 community college hours applied to degree
- Grades of C or higher in all professional education and content courses