



THE UNIVERSITY OF MICHIGAN-ANN ARBOR
SCHOOL OF EDUCATION
TEACHER EDUCATION PROGRAM

Integrated Science MAJOR Requirements for Secondary Teacher Certification

Please note: Major/minor requirements are subject to change. All candidates are expected to consult with a School of Education advisor as they plan and progress through their program.

Integrated Science majors must complete a minimum of 45 credits including the following courses:

Prerequisite Courses:

(Note: These do not count toward the required credits for the major.)

Course Number	Course Title	Credits	Completed?
Math 115	Calculus I	4	
Math 116	Calculus II	4	
Math 215	Calculus III	4	
Math 216	Introduction to Differential Equations	4	
Chemistry 125	General Chemistry Lab I	1	
Chemistry 130 *	General Chemistry: Macroscopic Investigations and Reaction Principles	3	

* If possible, student should take the studio section of Chemistry 130. This section is generally only offered in the fall. Please contact the Chemistry Department at (734) 763-7315 to identify which section is the studio section.

Major Requirements: (MUST COMPLETE)

Course Number	Course Title	Credits	Completed?
Education 422	Teaching of Science in the Secondary School	3	
Biology 162	Introductory Biology	5	
Biology 225	Principles of Animal Physiology: Lecture	3	
Chemistry 210	Structure and Reactivity I	4	
Chemistry 211	Investigations in Chemistry	1	
Chemistry 215	Structure and Reactivity II	3	
Chemistry 216	Synthesis and Characterization of Organic Compounds	2	
Physics 140/141	General Physics I/Lab	5	
Physics 240/241	General Physics II/Lab	5	

Astronomy 111	Introductory Astronomy: The Solar System	4	
GEOSCI 118/119	Introductory Geology Lab and Lectures	5	

Select one course:

Biology 310	Introductory Biochemistry	4	
Biology 331			
Biochemistry 415	Introductory Biochemistry	3	