



Secondary Endorsement Chemistry 5-12

Students majoring in Secondary Education must complete the prescribed pre-education requirements, the requirements for the Secondary Education major, and at least one content endorsement. This endorsement can be completed as the student's first content endorsement.

Students must earn a minimum 3.0 GPA in courses required for the major and each endorsement. The grade of B or above must be earned in designated education major pre-admission and major courses, and students must earn a grade of C or above in all other courses required for the major pre-admission courses, major, and each endorsement. Please see the university catalog for additional information.

Note: the faculty of the education department strongly advise completion of additional endorsements in biology, basic science, or STEM if middle school focused.

Iowa Teaching Endorsement: #152

Requirements for the Endorsement: Methods coursework plus 30 credits content area coursework

Teaching Methods Requirements

Essential Competencies-Outcome Iterations **Transfer courses do not receive outcome iterations**

			CI	IL	W	O	Q	GA	V
EDUC 348	Secondary Science Methods	2							
EDUC 411	Nature of STEM	2							

Science Content Requirements

			CI	IL	W	O	Q	GA	V
CHEM 111	General Chemistry I*	4	x				x		
CHEM 112	General Chemistry II	4							
CHEM 321	Organic Chemistry I	5							
PHYS 131 and 132 Or PHYS 241 and 242	Introduction to Physics I and II** Or General Physics I and II***	8 Or 10	x (241)					x (241)	
Plus one additional upper division (300-level +) chemistry course		3-5							
Select 3-6 credits from the following options (may not repeat course taken for "Plus one upper division chemistry course" requirement									
PHSC 260	History and Philosophy of Science	3	x	x		x			
CHEM 322	Organic Chemistry II	5				x			
CHEM 341	Quantitative Analysis	4					x		
CHEM 351	Biochemistry	3							
CHEM 361	Physical Chemistry	4							
CHEM 499	Research in Chemistry	1-4							

Minimum 30 credits required in science content

**Prerequisite is MATH 121 and 122 or consent of instructor.

***Prerequisite is MATH 231 (or concurrent enrollment).

ANY CHANGES/SUBSTITUTIONS MUST BE APPROVED BY THE GRAND VIEW UNIVERSITY EDUCATION DEPARTMENT CHAIR.

This information must be used in conjunction with the 2019-2020 Grand View University Catalog and does not reflect a student's official record of progress. Students are expected to use the Progress tool found on myView > GV Self Service when monitoring and planning coursework. Other available resources include: Course Planning Documents (found on myView under Academics) and the faculty and staff who work with academic requirements.