

Complementary Secondary Endorsement Chemistry 5-12

Complementary teaching endorsements support initial Secondary Education teaching licenses. These complementary endorsements authorize a teacher to teach in additional content areas in grades 5-12. Students must earn a minimum 3.0 GPA in courses required for each endorsement. No D grades are accepted. Please see the Secondary Education major sheet and/or the university catalog for additional information.

After completing any 5-12 Secondary Education Initial Content Endorsement in a <u>science area</u>, a Basic Science Endorsement may be added.

Iowa Teaching Endorsement: #152

Requirements for the Endorsement: 16-17 credits

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

			CI	IL	W	0	Q	GA	V
CHEM 111	General Chemistry I	4	Х				Х		
CHEM 112	General Chemistry II	4							
CHEM 321	Organic Chemistry I	5							
CHEM 341 or	Quantitative Analysis or	4 or					Х		
CHEM 351	Biochemistry	3							