

CHEMISTRY MAJOR - SECONDARY EDUCATION

Chemistry Major with a Minor in Secondary Education

Course	Title	Hours
First Year		
Fall		
CHEM 125 & CHEM 201	Introduction to Chemical Structure and Properties and Purification and Separation Lab I	4
EDUC 111	Introduction to Teaching and Learning in a Diverse World	4
INTG 100	Foundations	4
MATH 119	Calculus I	4
INTG 105	College Success	1
Hours		17
Spring		
CHEM 250 & CHEM 202	Reactions of Nucleophiles and Electrophiles (Reactivity 1) and Purification and Chromatography Lab II	4
LANG 111		4
MATH 120	Calculus II	4
PHYS 105	Physics for the Life Sciences I	4
Hours		16
Second Year		
Fall		
EDUC 203	Development, Learning, and Mental Health in Childhood and Adolescence	4
LANG 112		4
CHEM 251 & CHEM 203	Intermediate Reactions of Nucleophiles and Electrophiles (Reactivity 2) and Synthesis Lab	4
THEO 100	Theological Explorations	4
EDUC 352	Teaching Reading in the Middle/Secondary Classroom	2
Hours		18
Spring		
CHEM 255 & CHEM 205	Macroscopic Chemical Analysis and Chemical Measurement Lab	4
INTG REQ		4
EDUC 379A & EDUC 305	Educational Psychology: Myths Versus Science and Human Exceptionalities: School, Home, and Community	5
LANG 211		4
CHEM 349	Chemistry in Experience and Practice	0
EDUC 213	Clinical Experience for K-12/5-12 Majors	1
Hours		18
Third Year		
Fall		
EDUC 355	Pedagogy in Grades 9-12 (fall only)	4
CHEM 305	Integrated Laboratory	4
CHEM 318	Microscopic Chemical Analysis	4
CHEM 315	Advanced Reactions (Reactivity 3)	4
Select 2 credit in depth CHEM		2
Hours		18
Spring		
THEO Integrations		4
INTG REQ		4
CHEM Elective (2nd of 2 electives)		4
EDUC 390	Ethics in Human Relations	4

CHEM 304	Analytical Method Development and Validation Laboratory	1
CHEM 306	Advanced Laboratory Topics	1
Hours		18
Fourth Year		
Fall		
PHYS 106	Physics for the Life Sciences II	4
INTG 300	Learning Integrations	4
CHEM XXX (1 of 2 electives)		4
Select 2 credit in depth CHEM or capstone		2
Select 2 credit in depth CHEM		2
EDUC 359A	Issues in Education K-6 or K-8	1
Hours		17
Spring		
EDUC 36X	Student Teaching	16
Hours		16
Total Hours		138