## Minor in Chemistry and B.S. in Secondary Education 9-12

Students can either double major in Chemistry and Secondary Education OR major in Secondary Education and minor in Chemistry and take a significant number of additional courses in the sciences to achieve this certification at William Jewell.

Because the double major option is such a long program of study this advising sheet reflects the Secondary Education major and Chemistry minor that will lead to certification. Please consult your advisor if you have questions. Student is responsible for monitoring progress toward admission to teacher education program and completion of degree and certification requirements including completion of a minimum of 124 credits (including transfer credit consistent with college policies).

		Course Name	Credits	Semester Completed	Grade
Secondary (9-12) Ed. Requirements	EDU 175	Culturally Responsive Teaching (2)			
	EDU 206	Teaching Diverse Learners (4)			
	EDU 213	Alternative Clinical Fieldwork in Schools II (1) - Optional			
	EDU 214	Clinical Fieldwork in Schools I (1)			
	EDU 220	High Leverage Teaching Strategies (4)			
	EDU 275	Instructional Design & Assessment (4)			
	EDU 280	Disciplinary Literacy & Methods of Instruction (5)			
	EDU 308	Literacy Interventions in the Secondary Classroom (4)			
	EDU 311	Clinical Fieldwork in Schools II (1)			
	EDU 315	Clinical Fieldwork in Schools III (1)			
	EDU 401	Reflective Student Teaching Seminar (4)			
	EDU 420	Student Teaching in Secondary School I (6)			
	EDU 421	Student Teaching in Secondary School II (6)			
	EDU 501	Intro to Differentiated Instruction (4)			
	100 301	46 Credits	0		
		40 credits	U		
	CTI 100	The Responsible Self (4)			
	CTI 102	Written Communication (4)			
	CTI 105	Math for the Liberal Arts (4) or equivalent that meets WJC			
Core Curriculum Requirements		math requirement			
	CTI 150	Identity & Society (2)			
	C11 150	identity & Society (2)			
	CTI XXX*	Diversity & Inclusion US (COM/WST 381, CTI 200, CTI/WST 221, CTI 238, CTI 239, CTI 240, CTI 284 - STRONGLY SUGGESTED, CTI 286, HIS 202, ENG 255, ENG/WST 260) (0-4)			
	CTI XXX*	Diversity & Inclusion Global (GEO 304, CTI 215, PHI 399, CTI 216, CTI 219, COM 358, CTI 287, HIS 310, FRE 315, POL 230, SPA 315, SPA 324) (0-4)			
		201-220 Culture & Traditions Course (4) - if not already met			
5 O	CTI 2XX	hy a D&I course			
Core C	CTI 2XX	by a D&I course Astronomy & Cosmology - required for CTI as the S&T and for certification (4)			
Core C		Astronomy & Cosmology - required for CTI as the S&T and for certification (4)  225-249 Sacred and Secular Course (4) - if not already met by			
Core Ci	CTI 258	Astronomy & Cosmology - required for CTI as the S&T and for certification (4)  225-249 Sacred and Secular Course (4) - if not already met by a D&I course			
Core Ci	CTI 258	Astronomy & Cosmology - required for CTI as the S&T and for certification (4)  225-249 Sacred and Secular Course (4) - if not already met by	0		

				Semester				
		Course Name	Credits	Completed	Grade			
	Note: To insure completion of the degree is possible in 4 years, the student completes Chemistry minor.							
	CHE 122	General Chemistry II (4) + Lab (1) (Inorganic) (5)						
	CHE 205	The Informed Chemist (1)						
ents	CHE 206	Analytical Chemistry (4) + Lab (1) (5) Minor choice; required certification						
Ĕ	CHE 301	Organic Chemistry I (4) + Lab (1) (5)						
i i	CHE 302	Organic Chemistry II (4) + Lab (1) (5)						
y Req	CHE 450	Biochemistry (4) + Lab (1) (5) Minor choice; required certification						
Chemistry Requirements	Additional Requirements for Certification							
ਠ	BIO 133	Ecology & Evolution (4) + Lab (1) (5)						
	CHE 401	Physical Chemistry I (4) & Lab (1) (5)						
	PHY XXX	PHY 111 College Physics I (4)+ Lab (1) or PHY 213 (4) General Physics I + Lab (1) [OR 112, 214]						
	PHI 357	Contemporary Philosophy of Science (4)						
		45 Credits	0					
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Electives								
leci								
Ш		TOTAL	0					

This advising sheet reflects a minor in Chemistry plus additional courses in the sciences and math. The courses here meet the MO certification requirements. If a student wants to complete a full Chemistry major, the program will take more than 4 years. Please consult your advisor.