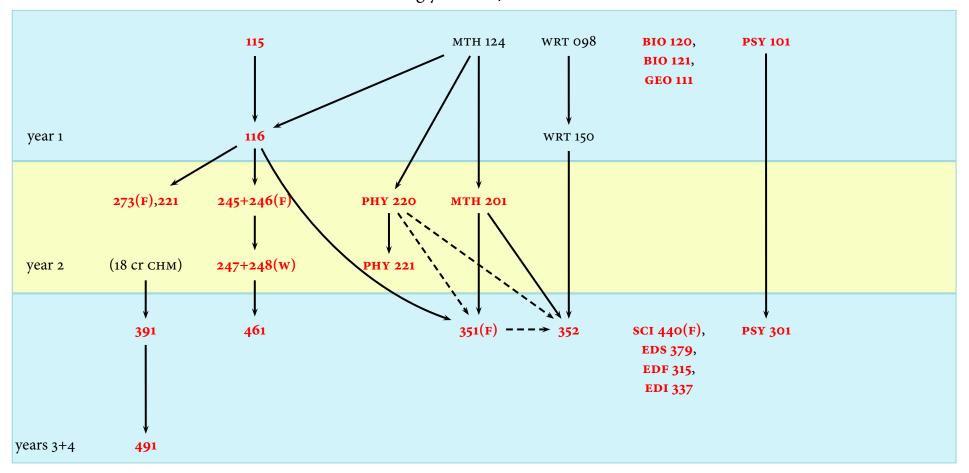
## Prerequisite Structure Chemistry Major — Education Emphasis Catalog years 2017 and later



- Solid arrows indicate strict prerequisites (one course must be taken before the other.) Dashed arrows indicate prerequisites that may be taken concurrently. Recommended scheduling within a 4-year program is indicated by shaded bands but is not required.
- (F) and (W) indicate courses that are taught only in fall or winter semesters.
- These courses are required.
- Students seeking a degree certified to meet American Chemical Society guidelines must take additional CHM courses above the 200 level totaling at least 7 credits and at least 190 hours of lab, and including either CHM 462 or 477. CHM 490 and 499 can contribute toward this requirement.

## Course titles, credits (Cr), and upper-level laboratory hours (LH)

			Cr	LH				Cr
CHM	115	Principles of Chem I	4		MTH	201	Calculus I	4
	116	Principles of Chem II	5			202	Calculus II	4
	221	Survey of Analytical Chem	4		PHY	220	General Physics I	5
	245	Principles of Organic Chem I	4			221	General Physics II	5
	246	Principles of Organic Chem I Lab	1			230	Principles of Physics I	5
	247	Principles of Organic Chem II	3			231	Principles of Physics II	5
	248	Principles of Organic Chem II Lab	1		BIO	120	General Biology I	4
	273	Principles of Inorganic Chem	3			121	General Biology II	4
	325	Instrumental Analysis	4	42		375	Genetics	3
	351	Introduction to Phys Chem	3			376	Genetics Lab	1
	352	Applied Phys Chem	1		GEO	111	Exploring the Earth	4
	356	Phys Chem I	3		PSY	101	Introductory Psychology	3
	358	Phys Chem II	3			301	Child Development	3
	391	Chem Seminar I	1		SCI	440	Chemistry and Physics in Secondary Ed	3
	421	Green Chem For Sustainable Environment	3		EDF	315	Diverse Perspectives on Education	3
	427	Green and Environmental Chem Lab	3	56	EDI	337	Intro to Learning and Assessment	3
	441	Advanced Organic Chem	3		EDS	379	Universal Design for Learning: Secondary	3
	442	Polymer Chem Green Indust Proc	3					
	447	Advanced Organic Lab	3	70				
	457	Advanced Phys and Instrum Chem Lab	3	56				
	461	Biochemistry I	4					
	462	Techniques in Biochemistry	3	84				
	463	Biochemistry II	3					
	471	Advanced Inorganic Chem	3					
	475	Electrochemistry	3					
	477	Synthetic Inorganic Chem	3	70				
	490	Chem Laboratory Internship	1-4	varies				
	491	Chem Seminar II	1					
	499	Investigation Problems	1-5	42/cr				