Program: CHEM		T	T	1
Program Student Learning Goals Successful graduates from this program will be able to	Think like a chemist 1A Analyze chemical behavior using structure- function relationships 1B Assess chemical mechanisms using reaction-energy relationships 1C Apply qualitative and quantitative reasoning to solve problem	Work like a chemist 2A Exhibit a culture of workplace safety and chemical hygiene 2B Use qualitative and quantitative methods to analyze structure, function, and chemical reactivity 2C Apply appropriate laboratory techniques for successful synthesis and purification of chemical compounds 2D Exhibit a familiarity with modern chemical instrumentation, including the applications of such tools	Write like a chemist 3A Record, in a permanent fashion, laboratory procedures and data in a concise and accurate manner 3B Write clear and effective reports of activity in the laboratory 3C Communicate effectively in presentation of experimental and theoretical results as well as promotion of awareness of chemical issues to the general public	*Foundation course
CHE 211, 212	I (1A, 1B, 1C)	I (2A, 2B, 2C, 2D)	I (3A, 3B)	
CHE 213	I/R (1A, 1C)	I/R (2A, 2B, 2C, 2D)	I/R (3A, 3B), I 3C	
CHE 331, 332	R (1A, 1B, 1C)	R (2A, 2B, 2C, 2D)	R (3A, 3B)	
CHE 323	R/M (1A, 1C)	R (2A), R/M (2B)	R (3A, 3B, 3C)	
CHE 345	R (1A, 1B), R/M (1C)		R (3C)	
CHE 495	(- /		M (3C)	
MAT 201, 202			, ,	F
PHY 151, 152 or 261, 262				F
	STUDENT	S MUST PICK ONE CONC.	ENTRATION	
GENERAL CONCENTRATION				
CHE 423	R/M (1A, 1B, 1C)	R/M (2A, 2B, 2C, 2D)	R/M (3A, 3B)	
CHE 473	M (1A, 1B, 1C)	M (2A, 2C, 2D)	M (3A, 3B)	
CHE ELECTIVES 300 OR HIGHER		,		
BIO 211, 212 or GEO 225, 226 BIOCHEMISTRY				F
CONCENTRATION CHE 363	D/M (1 A 1D 10)		D 4 4 (2.0)	
CHE 363L	R/M (1A, 1B, 1C)	M (2A 2D 2C 2D)	R/M (3C)	
CHE 303E		M (2A, 2B, 2C, 2D)	R/M (3A, 3B, 3C)	
CHE 433	M (1A, 1B, 1C)		M (3C)	
CHE ELECTIVES 300 or HIGHER				
BIO 211, 212				F
BIO 321				F
BIO 327				F
BIO 453 ENVIRONMENTAL	R/M (1A, 1B, 1C)	R/M (2A, 2B, 2D)	R/M (3A, 3B, 3C)	
CONCENTRATION				

CHE 405						
CHE 423	R/M (1A, 1B, 1C)	R/M (2A, 2B, 2C, 2D)	R/M (3A, 3B)			
CHE ELECTIVES 300 or HIGHER						
BIO 211, 212				F		
BIO 323				F		
GEO 225				F		
GEO 226				F		
MAT 112				F		
PROFESSIONAL CONCENTRATION						
CHE 346	M (1A, 1B, 1C)		M (3C)			
CHE 346L	M (1A, 1B, 1C)	M (2A, 2B, 2C, 2D)	M (3A, 3B, 3C)			
CHE 363	R/M (1A, 1B, 1C)		R/M (3C)			
CHE 363L		M (2A, 2B, 2C, 2D)	R/M (3A, 3B, 3C)			
CHE 423	R/M (1A, 1B, 1C)	R/M (2A, 2B, 2C, 2D)	R/M (3A, 3B)			
CHE 473	M (1A, 1B, 1C)	M (2A, 2C, 2D)	M (3A, 3B)			
CHE ELECTIVES 300 or HIGHER						
CHE 463	M (1A, 1B, 1C)		M (3C)			
CHE 433L		M (2A, 2B, 2C, 2D)	M (3A, 3B)			
CHE 350	I/R/M (1A, 1B, 1C)	I/R/M (2A, 2B, 2C, 2D)	I/R/M (3A, 3B, 3C)			
CHE 400	R/M (1A, 1B, 1C)		R/M (1A, 1B, 1C)			
CHE 400L		R/M (2A, 2B, 2C, 2D)	R/M (1A, 1B, 1C)			
Curriculum	Place a letter in the appropriate box where the program goal is Introduced, Reinforced, and/or Mastered.					
Мар	\mathbf{I} = Introduced; program student learning goal is introduced					
Key	${f R}$ = Reinforced; provide practice opportunities for the program student learning goal					
	\mathbf{M} = Mastered; demonstrated mastery of the program student learning goal. Some courses may have two letters (I/R or R/M) or all three (I/R/M)					
	*Foundation Course					
	A course that provides base skills needed to be successful in the program.					
	Programs may not require or have foundation courses; it will vary from program to program.					