Generic Four-Year Plan for Chemistry Majors Starting Fall 2010 or Later

- This is intended as an <u>example</u> of one way that a chemistry major's schedule can be designed so that the requirements of the Liberal Studies Program (LSP) and the requirements for the BS degree in chemistry can be met in a four-year timeframe. Students who begin with CHEM 129 or enter with some of these requirements already met will follow an amended schedule.
- LSP courses are listed as suggestions only. For example, you do not have to take a Foreign Language course in your sophomore year; you may choose to take a Modes of Inquiry Course or other LSP course instead. You just need to develop a plan so that you satisfy the requirements of the LSP.

	Freshman Year			
1st Semester	Course	Credits		
CHEM 130	Chemical Principles I with Lab	4		
CHEM 145	Freshman Seminar	-		
MATH 198		5		
	Calculus I (Satisfies Math Mode of Inquiry)	5		
LSP	Modes of Inquiry Course	<u>3</u> 13		
	Semester Total	13		
2nd Semester				
CHEM 131	Chemical Principles II with Lab	4		
MATH 263	Calculus II	5		
STATS 190	Basic Statistics	3		
ENG 190	Writing as Critical Thinking	3		
	Semester Total	<u>3</u> 15		
Sophomore Year				
1st Semester	Course	Credits		
CHEM 222	Intro. to Quant. Analysis with Lab	4		
CHEM 245	Sophomore Seminar	1		
CHEM 329	Organic Chemistry I	3		
MATH 264	Calculus III (Fulfills BS requirement)	3		
HLTH 195/6	Lifetime Health and Fitness	2		
LSP	Interconnecting Pers Foreign Language	3		
	Semester Total	<u>5</u> 16		
	Semester Total	10		

2nd Semester		
CHEM 331	Organic Chemistry II	3
CHEM 333	Organic Chemistry I &II Lab	2
	(or CHEM 330 for Organic Chem I)	(1 [*])
PHYS 195 ^a	Physics with Calculus I with Lab	5
COMM 170	Fundamentals of Speech	3
LSP	Interconnecting PersForeign Language	3
	Semester Total	$16(15^{*})$
	^a While PHYS 195 is recommended, PHYS 185, College	. ,
	Physics I, may also be taken (this is a 4 credit course)	

	Junior Year	
1st Semester	Course	Credits
CHEM 345	Junior Seminar	1
CHEM 323	Physical Chemistry I	3
CHEM 324	Physical Chemistry I Lab (Writing Enhanced)	1
CHEM 332	(for Organic Chem II Lab)**	(1 [*])
PHYS 196 ^b	Physics with Calculus II with Lab	5
LSP	Junior Interdisciplinary Seminar Course (JINS)	3 <u>3</u>
LSP	Modes of Inquiry Course	<u>3</u>
	Semester Total	16 (17 [*])
	^B While PHYS 196 is recommended, PHYS 186, College	
	Physics II, may also be taken (this is a 4 credit course)	
	**Not needed if taken CHEM 333	
2nd Semester		
CHEM 322	Instrumental Analysis with Lab	Λ
CHEM 325	Physical Chemistry II	4 3
CHEM 326	Physical Chemistry II Lab (Writing Enhanced)	1
LSP	Intercultural Perspective*/or Elective	
LSP	Modes of Inquiry Course	3
Elective		2
	Semester Total	3 3 <u>2</u> 16
	*This requirement can be incorporated into	
	another LSP requirement	

	Senior Year	
1st Semester	Course	Credits
CHEM 335	Biochemistry I: Structure and Function	3
CHEM 310	Modern Methods in Biochemistry	1
CHEM 445	Senior Seminar	1
CHEM 473	Inorganic Chemistry	3
CHEM 474	Inorganic Chemistry Lab	1
CHEM or <i>Elective</i>	Advanced Chemistry Course/Research or Chemistry Elective*	3
LSP	Mode of Inquiry Course	3
LSP	Missouri Statute	<u>1</u> 16
	Semester Total	16
2nd Semester		
CHEM or <i>Elective</i>	Advanced Chemistry Course/Research or Elective*	3
CHEM or <i>Elective</i>	Advanced Chemistry Course/Research or Elective*	3
LSP	Modes of Inquiry Course	3
LSP	Modes of Inquiry Course	3 <u>3</u> 15
Elective		<u>3</u>
	Semester Total	15
	*Need >2 hours of advanced chemistry credit (400-level coursework or research) in addition to Biochemistry	
	Four-Year Total	>120