

## Generic Four-Year Plan for Chemistry Majors Starting Fall 2007 or Later

- This is intended as an example 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 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.

<b>Freshman Year</b>		
<b>1st Semester</b>	<b>Course</b>	<b>Credits</b>
CHEM 120	Chemical Principles I	5
CHEM 120	Chemical Principles I Lab	0
CHEM 145	Freshman Seminar	1
MATH 198	Calculus I (Satisfies Math Mode of Inquiry)	5
LSP	Modes of Inquiry Course	<u>3</u>
<b>Semester Total</b>		<b>14</b>
<b>2nd Semester</b>		
CHEM 121	Chemical Principles II	5
CHEM 121	Chemical Principles II Lab	0
MATH 263	Calculus II	5
STATS 190	Basic Statistics	3
ENG 190	Writing as Critical Thinking	<u>3</u>
<b>Semester Total</b>		<b>16</b>

<b>Sophomore Year</b>		
<b>1st Semester</b>	<b>Course</b>	<b>Credits</b>
CHEM 222	Intro. to Quant. Analysis	4
CHEM 222	Intro. to Quant. Lab	0
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	<u>3</u>
<b>Semester Total</b>		<b>16</b>
<b>2nd Semester</b>		
CHEM 331	Organic Chemistry II	3
CHEM 333	Organic Chemistry I & II Lab (or CHEM 330 for Organic Chem I)	2 (1)
PHYS 195*	Physics with Calculus I	5
PHYS 195*	Physics with Calculus I Lab	0
COMM 170	Fundamentals of Speech	3
LSP	Interconnecting Pers.-Foreign Language	<u>3</u>
<b>Semester Total</b>		<b>16 (17)</b>
<i>*While PHYS 195 is recommended, PHYS 185, College Physics I, may also be taken (this is a 4 credit course)</i>		

<b>Junior Year</b>		
<b>1st Semester</b>	<b>Course</b>	<b>Credits</b>
CHEM 345	Junior Seminar	1
CHEM 323	Physical Chemistry I	3
CHEM 323	Physical Chemistry I Lab (Writing Enhanced)	1
CHEM 332	(for Organic Chem II Lab)**	(1*)
PHYS 196 *	Physics with Calculus II	5
PHYS 196 *	Physics with Calculus II Lab	0
LSP	Junior Interdisciplinary Seminar Course (JINS)	3
LSP	Modes of Inquiry Course	<u>3</u>
	<b>Semester Total</b>	16 (17)
	<i>*While PHYS 196 is recommended, PHYS 186, College Physics II, may also be taken (this is a 4 credit course)</i>	
	<i>**Not needed if taken CHEM 333</i>	
<b>2nd Semester</b>		
CHEM 322	Instrumental Analysis	4
CHEM 322	Instrumental Analysis Lab	0
CHEM 325	Physical Chemistry II	3
CHEM 325	Physical Chemistry II Lab (Writing Enhanced)	1
LSP	Intercultural Perspective*/or Elective	3
LSP	Modes of Inquiry Course	3
<i>Elective</i>		<u>2</u>
	<b>Semester Total</b>	16
	<i>*This requirement can be incorporated into another LSP requirement</i>	

<b>Senior Year</b>		
<b>1st Semester</b>	<b>Course</b>	<b>Credits</b>
CHEM 421	Biochemistry	4
CHEM 445	Senior Seminar	1
CHEM 475	Inorganic	4
CHEM 475	Inorganic Lab	0
CHEM or <i>Elective</i>	Advanced Chem Course/Research or Chemistry Elective*	3
LSP	Mode of Inquiry Course	3
LSP	Missouri Statute	<u>1</u>
	<b>Semester Total</b>	16
<b>2nd Semester</b>		
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
<i>Elective</i>		<u>3</u>
	<b>Semester Total</b>	15
	<i>*Need &gt;2 hours of advanced chemistry credit (400-level coursework or research) in addition to Biochemistry</i>	
	<b>Four-Year Total</b>	<b>124</b>