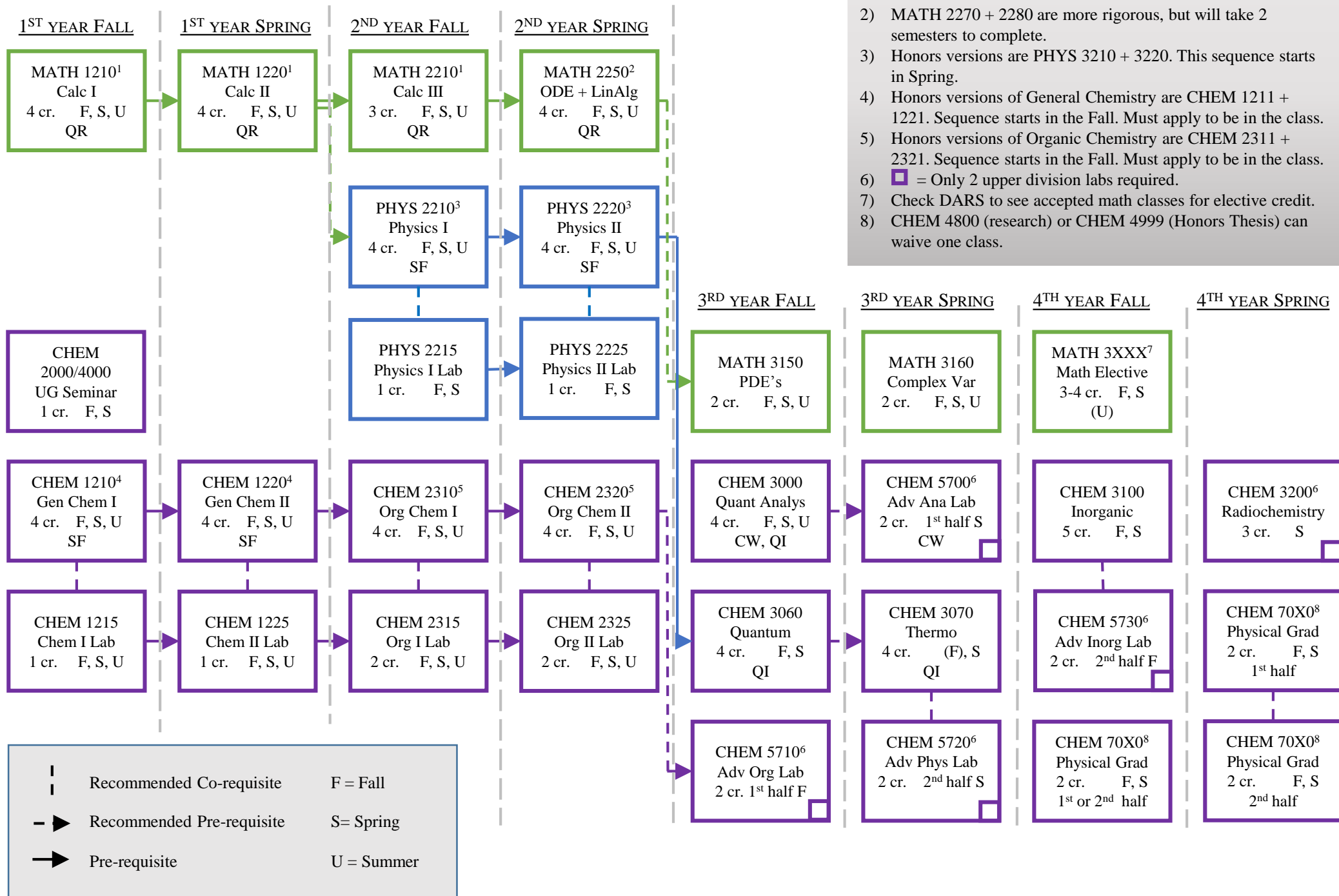


Chemistry Course Requirements – Physics Emphasis (2016-17)

The Physics emphasis is more math-intensive and gives students the opportunity to take some graduate-level physical chemistry classes. Careers in physical chemistry allow students to discover, test, and understand the fundamental physical characteristics of a material.

- 1) Can take whichever calculus sequence is appropriate, including AP Calculus (MATH 1250 & 1260) or Engineering Calculus (MATH 1310 & 1320) Must finish the sequence that was started.
- 2) MATH 2270 + 2280 are more rigorous, but will take 2 semesters to complete.
- 3) Honors versions are PHYS 3210 + 3220. This sequence starts in Spring.
- 4) Honors versions of General Chemistry are CHEM 1211 + 1221. Sequence starts in the Fall. Must apply to be in the class.
- 5) Honors versions of Organic Chemistry are CHEM 2311 + 2321. Sequence starts in the Fall. Must apply to be in the class.
- 6) = Only 2 upper division labs required.
- 7) Check DARS to see accepted math classes for elective credit.
- 8) CHEM 4800 (research) or CHEM 4999 (Honors Thesis) can waive one class.



Chemistry Course Requirements – Physics Emphasis (2016-17)

The Physics emphasis is more math-intensive and gives students the opportunity to take some graduate-level physical chemistry classes. Careers in physical chemistry allow students to discover, test, and understand the fundamental physical characteristics of a material.

Physics Emphasis											
Done?	Dept.	Number	Course Name	Credit Hours	Gen Ed/ Bach Req	Prerequisites			Taught		
						Chemistry	Math/Other		F	S	U
MATH CLASSES											
<input type="checkbox"/>	MATH	1210	Calculus I ^o	4	QR		MATH 1060 or 1080		x	x	x
<input type="checkbox"/>	MATH	1220	Calculus II ^o	4	QR		MATH 1210		x	x	x
<input type="checkbox"/>	MATH	2210	Calculus III ^o	4	QR		MATH 1220		x	x	x
<input type="checkbox"/>	MATH	2250	ODEs and Linear Algebra ^o	4	QR		MATH 2210		x	x	x
<input type="checkbox"/>	MATH	3150	PDE's	2			MATH 2250		x	x	x
<input type="checkbox"/>	MATH	3160	Complex Variables	2			MATH 2250		x	x	x
<input type="checkbox"/>	MATH	3XXX		3-4			See list of approved courses and DARS				
PHYSICS CLASSES											
<input type="checkbox"/>	PHYS	2210	Physics for Sci & Eng I ^o	4	SF		MATH 1210		x	x	x
<input type="checkbox"/>	PHYS	2215	Physics Lab for Sci & Eng I	1			MATH 1210		x		
<input type="checkbox"/>	PHYS	2220	Physics for Sci & Eng II ^o	4	SF		MATH 1220 + PHYS 2210		x	x	x
<input type="checkbox"/>	PHYS	2225	Physics Lab for Sci & Eng II	1			MATH 1220 + PHYS 2210		x		x
CHEMISTRY CLASSES											
<input type="checkbox"/>	CHEM	2000/4000	Undergrad Seminar	1					x	x	
<input type="checkbox"/>	CHEM	1210 + 1215	General Chemistry I ^o + Lab	4 + 1	SF		MATH 1050		x	x	x
<input type="checkbox"/>	CHEM	1220 + 1225	General Chemistry II ^o + Lab	4 + 1	SF		CHEM 1210 + 1215		x	x	x
<input type="checkbox"/>	CHEM	2310 + 2315	Organic Chemistry I ^A + Lab	4 + 2			CHEM 1220 + 1225		x	x	x
<input type="checkbox"/>	CHEM	2320 + 2325	Organic Chemistry II ^A + Lab	4 + 2			CHEM 2310 + 2315		x	x	x
<input type="checkbox"/>	CHEM	3000	Quantitative Analysis	4	QI, CW		MATH 1220 + 1250		x	x	x
<input type="checkbox"/>	CHEM	3060	Quantum Chemistry & Spect	4	QI		MATH 2210 + PHYS 2220		x		x
<input type="checkbox"/>	CHEM	3070	Thermodynamics & Kinetics	4	QI		MATH 2210 + PHYS 2220		(x)	x	
<input type="checkbox"/>	CHEM	3100	Inorganic Chemistry	5			CHEM 1220, CHEM 2320, 3060		x	x	
ADVANCED LABS - Choose 2											
<input type="checkbox"/>	CHEM	5700	Analytical Chemistry Lab	2	CW		CHEM 3000				1st
<input type="checkbox"/>	CHEM	5710	Organic Chemistry Lab	2			CHEM 2320			1st	
<input type="checkbox"/>	CHEM	5720	Physical Chemistry Lab	2			CHEM 3060, 3070				2nd
<input type="checkbox"/>	CHEM	5730	Inorganic Chemistry Lab	2			CHEM 3100			2nd	
<input type="checkbox"/>	CHEM	3200	Radiochemistry	3							x
PHYSICAL CHEMISTRY ELECTIVES[†]: Need 6 credit hours of approved electives (see list of approved courses and DARS)											
<input type="checkbox"/>	CHEM	70X0		2			CHEM 3060, 3070				
<input type="checkbox"/>	CHEM	70X0		2			CHEM 3060, 3070				
<input type="checkbox"/>	CHEM	70X0		2			CHEM 3060, 3070				

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[†]: CHEM 4800 (research) or CHEM 4999 (Honors Thesis) can count for up to 2 credit hours.