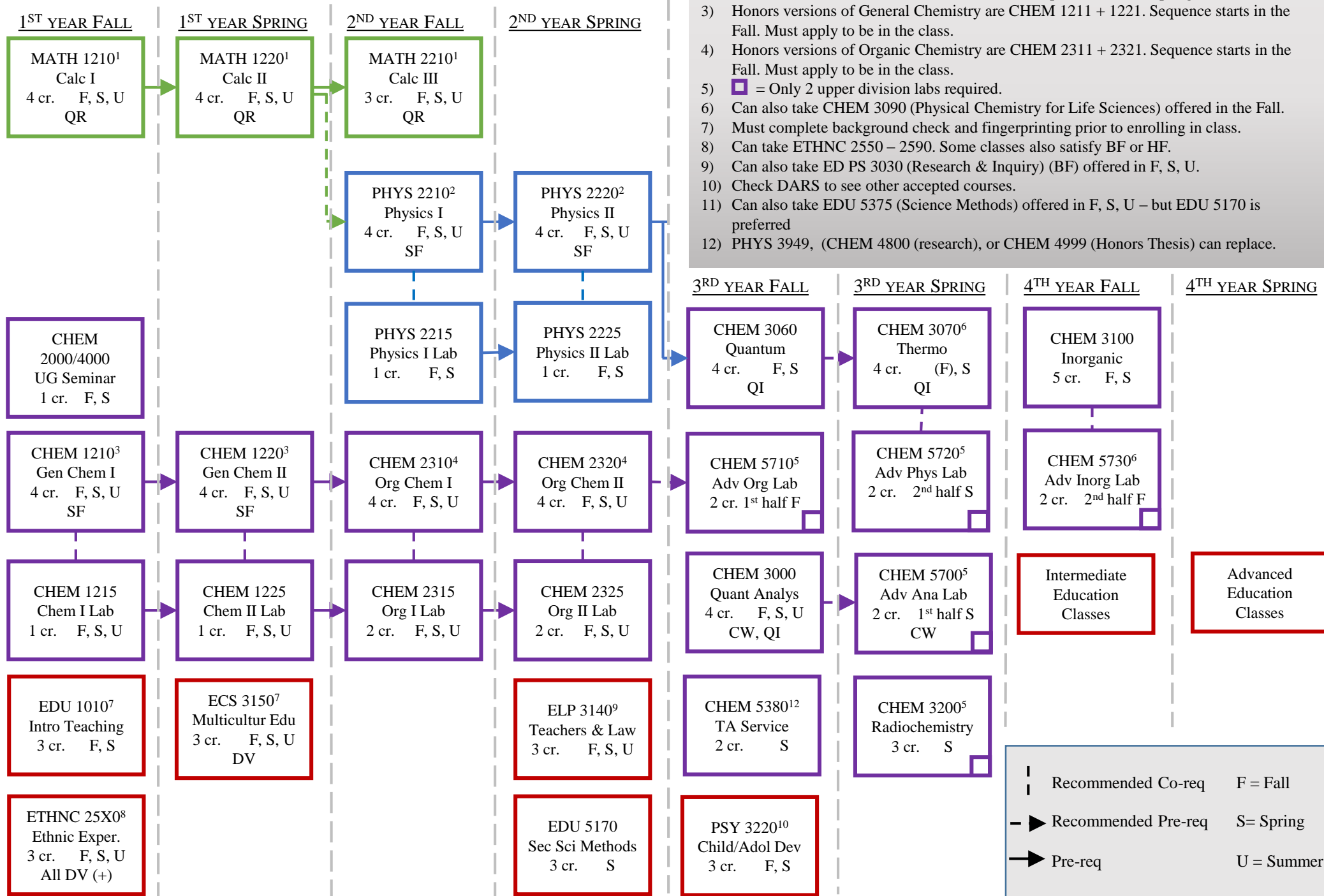
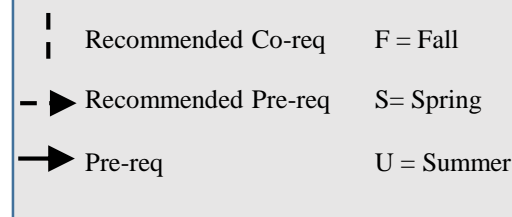


Chemistry Course Requirements – Teaching Emphasis (Without Certification) (2016-17)

The Teaching emphasis is a great option for students who are interested in teaching high school chemistry, where jobs are readily available. Students should meet with education department **early in their degree** to ensure certification by end of degree.



- 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) Honors versions are PHYS 3210 + 3220. This sequence starts in Spring.
- 3) Honors versions of General Chemistry are CHEM 1211 + 1221. Sequence starts in the Fall. Must apply to be in the class.
- 4) Honors versions of Organic Chemistry are CHEM 2311 + 2321. Sequence starts in the Fall. Must apply to be in the class.
- 5) = Only 2 upper division labs required.
- 6) Can also take CHEM 3090 (Physical Chemistry for Life Sciences) offered in the Fall.
- 7) Must complete background check and fingerprinting prior to enrolling in class.
- 8) Can take ETHNC 2550 – 2590. Some classes also satisfy BF or HF.
- 9) Can also take ED PS 3030 (Research & Inquiry) (BF) offered in F, S, U.
- 10) Check DARS to see other accepted courses.
- 11) Can also take EDU 5375 (Science Methods) offered in F, S, U – but EDU 5170 is preferred
- 12) PHYS 3949, (CHEM 4800 (research), or CHEM 4999 (Honors Thesis) can replace.



Chemistry Course Requirements – Teaching Emphasis (Without Certification) (2016-17)

The Teaching emphasis is a great option for students who are interested in teaching high school chemistry, where jobs are readily available. Students should meet with education department **early in their degree** to ensure certification by end of degree.

Teaching Emphasis											
Done?	Depart.	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
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	x	
<input type="checkbox"/>	PHYS	2220	Physics for Sci & Eng II ^o	4	SF		MATH 1220 + 2210	PHYS	x	x	x
<input type="checkbox"/>	PHYS	2225	Physics Lab for Sci & Eng II	1			MATH 1220 + 2210	PHYS	x	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		CHEM 1220	MATH 1220 + 1250	x	x	x
<input type="checkbox"/>	CHEM	3060	Quantum Chemistry & Spect	4	QI		CHEM 1220	MATH 2210 + 2220	x	x	
<input type="checkbox"/>	CHEM	3070	Thermodynamics & Kinetics	4	QI		CHEM 1220	MATH 2210 + 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
TEACHING ELECTIVES¹											
<input type="checkbox"/>	EDU	1010	Intro to Teaching	3					x	x	
<input type="checkbox"/>	ETHNC	2550-2590	Ethnic Experiences	3	DV				x	x	x
<input type="checkbox"/>	ECS	3150	Multicultural Education	3	DV				x	x	x
<input type="checkbox"/>	ELP	3140	Teachers & Law	3					x	x	x
<input type="checkbox"/>	PSY ^o			3					x	x	(x)
<input type="checkbox"/>	EDU	5170 or 5375	Secondary Science Methods or Science Methods ^T	3	3						x
<input type="checkbox"/>	CHEM	5380	TA Service	2					x	x	x

^o: 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.

^o: Honors versions are PHYS 3210 + 3220. This sequence starts in Spring.

^o: Honors versions of General Chemistry are CHEM 1211 + 1221. Sequence starts in the Fall. Must apply to be in the class.

^Δ: Honors versions of Organic Chemistry are CHEM 2311 + 2321. Sequence starts in the Fall. Must apply to be in the class

[□]: Need Adolescent psychology course (PYS, FCS, ED PS). There are multiple options: see list of approved courses and DARS. ED PS 3030 counts as a BF gen ed.

^I: Visit with Education Advisor (Sara Hatch) for entrance into certification program.

^T: PHYS 3949, CHEM 4800 (research), or CHEM 4999 (Honors Thesis) can waive.