

Major in Chemistry, B.S. Degree

One Suggested Course Sequence (As of Fall 2013)

Year One

Semester 1

CHEM-UA 125	General Chem I & Lab	5 Credits
MATH-UA 121	Calculus I	4 Credits
PHYS-UA 11	General Physics I (*)	5 Credits
EXPOS-UA 1	Writing the Essay (%)	4 Credits
	Total	18 Credits

Year Two

Semester 1

CHEM-UA 225	Organic Chem I & Lab	5 Credits
CHEM-UA 140	Mathematics of Chemistry (Optional)(#)	4 Credits
	Elective	4 Credits
CORE-UA	CORE Course	4 Credits
	Total	17 Credits

Year Three

Semester 1

CHEM-UA 651 or 652	Physical Chemistry (***)	4 Credits
CORE-UA	CORE Course	4 Credits
	Elective	4 Credits
	Elective	4 Credits
	Total	16 Credits

Year Four

Semester 1

CHEM-UA 997	Adv. Individual Study(++)	4 Credits
CHEM-	Adv. Chemistry Elective (+)	4 Credits
	Elective	4 Credits
	Elective	4 Credits
	Total	16 Credits

Semester 2

CHEM-UA 126	General Chem II & Lab	5 Credits
MATH-UA 122	Calculus II	4 Credits
PHYS-UA 12	General Physics II (*)	5 Credits
	Elective	4 Credits
	Total	18 Credits

Semester 2

CHEM-UA 226	Organic Chem II & Lab	5 Credits
CSCI-UA 101	Computer Science (**)	4 Credits
	Elective	4 Credits
CORE-UA	CORE Course	4 Credits
	Total	17 Credits

Semester 2

CHEM-UA 651 or 652	Physical Chemistry (***)	4 Credits
CHEM-UA 661	Physical Chem. Lab	4 Credits
CHEM-	Adv Chemistry Elective(+)	4 Credits
CORE-UA	CORE Course	4 Credits
	Total	16 Credits

Semester 2

CHEM-UA 998	Adv. Individual Study(++)	4 Credits
CHEM-UA 711	Inorganic Chemistry	4 Credits
CHEM-	Advanced Chemistry Elective (+)	4 Credits
	Elective	4 Credits
	Total	16 Credits

@ - Most BS undergraduates are in the Engineering Program. They may take the majors Physics course, PHYS-UA 009, in the first year.

* - Physics may be taken in the second year. In which case for Pre-med students, Biology I & II, may be taken instead. Other options are possible.

** - One course in computer science, CSCI-UA 2 or higher, is required and may be taken in **EITHER** the Fall or Spring.

***- Physical Chemistry: Quantum Mechanics & Spectroscopy CHEM-UA 651 and Physical Chemistry: Thermodynamics & Kinetics CHEM-UA 652 may be taken in either order, both are offered in the spring and fall semesters.

- **Strongly** recommended, but not required.

+ - **Three advanced courses in Chemistry is required for the major, taken in the third or fourth year.** One course may be taken in a different department with the approval of the Director of Undergraduate Studies.

++ = CHEM-UA 995/CHEM-UA 996, Senior Honors in Chemistry may be substituted by qualified students.

% - To be taken in **EITHER** Fall or Spring semester.