

Chemistry

“Chemistry is called the ‘central science’ because of its central position in a fundamental understanding of diverse fields such as biology, medicine and pharmacy, physics, the environment, and geology. Our majors study the structure, properties, and reactivity of matter in both lecture and hands-on laboratories. Many of our students engage in undergraduate research where they work one-on-one with our faculty to apply course work to a real chemical problem. Graduating majors go on to pursue advanced degrees, gain employment in chemical industry and work in government laboratories.”



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New students considering a major in chemistry should take the Chemistry Placement test. Based on the test recommendation, majors should select either Foundations of Chemistry (**CHEM 101**) or General Chemistry I (**CHEM 111**) and an appropriate course in mathematics (e.g. **MATH 111, 121** or **MATH 122**) and/or physics (**PHYS 101** or **PHYS 105**). CHEM 111 fulfills the first semester of the two-semester natural science sequence (CHEM 111-112). CHEM 111 also fulfills a requirement for majors in biology, geology and environmental science and minors in neuroscience and pre-conservation in fine art. Course descriptions for the mathematics and physics courses can be found in the information for the Departments of Mathematics and Physics, respectively. Please visit the [Chemistry Department's website](#) for more information.

Below please find some examples of first semester schedules for a chemistry major. There are many variations of a first semester schedule; these examples are just meant to help you see that there are several ways to reach the same goals.

Example 1: Chemistry major with a CHEM 111 placement test recommendation

Course (credits)	Requirement(s) Met
1. CHEM 111 - General Chemistry I with Lab (4)	Major, NS
2. MATH 121** - Calculus I (3)	QR
3. SPAN 101** - Beginning Spanish (3)	Language, NS
4. PHYS 101 or 105 – College Physics I or University Physics I (4)	

Example 2: Chemistry major with pre-health (medicine, dentistry, veterinary science, etc.) interest

Course (credits)	Requirement(s) Met
1. CHEM 111 - General Chemistry I with Lab (4) or CHEM 101 – Foundations of Chemistry (3)	Major, NS Elective
2. FSEM 100X# - Celluloid Vampire: Dracula (3)	FSEM
3. MATH 121** - Calculus I (3)	QR
4. BIOL 121 – General Biology I with Lab (4)	NS
5. GERM 101** - Beginning German (3)	Language

Example 3: Chemistry major with a CHEM 101 placement test recommendation

Course (credits)	Requirement(s) Met
1. CHEM 101 – Foundations of Chemistry (3)	Elective
2. MATH 111** - Precalculus (3)	Elective
3. FREN 101** - Beginning French (3)	Language
4. FSEM 100B8# - Ethics & Literature (3)	FSEM
5. PHYD 412 - Intercollegiate Riding - Men & Women (1)	Elective
6. THEA 112 – Introduction to Acting (3)	ALPP

Athletes for varsity sports must register for the 400-level course of the sport. Practice times for varsity sports can vary, but, generally speaking, athletes should allow for enough time to get to and from practice on weekdays from 3 - 6 p.m. Please check with the individual coach for your sport to verify specific practice times each semester.

For the spring semester, students might consider the following example schedules:

Example 1: Chemistry major with CHEM 111 completed during the first semester

Course (credits)	Requirement(s) Met
1. CHEM 112 - General Chemistry II with Lab (4)	Major, NS
2. MATH 122** - Calculus II (3)	QR
3. SPAN 102** - Beginning Spanish (3)	Language
4. PHYS 102 or 106 – College Physics II or University Physics II (4)	NS

Example 2: Chemistry major with pre-health (medicine, dentistry, veterinary science, etc.) interest and one semester of Chemistry completed

Course (credits)	Requirement(s) Met
1. CHEM 112 - General Chemistry II with Lab (4) or CHEM 111 – General Chemistry I with Lab (4)	Major, NS Major, NS
2. ARTH114A – History of Western Art (3)	ALPA
3. MATH 122** - Calculus II (3)	QR
4. BIOL 122 – General Biology II with Lab (4)	NS
5. GERM 102** - Beginning German (3)	FL

Example 3: Chemistry major with a CHEM 101 completed during the first semester

Course (credits)	Requirement(s) Met
1. CHEM 111 – General Chemistry I with Lab (4)	Major, NS
2. MATH 121** - Calculus I (3)	QR
3. FREN 102** - Beginning French (3)	Language
4. HONR 100B# - Mad, Bad, Evil Scientists (3)	FSEM
5. SOCG 105 – The Social World (3)	HES

**Please note that not all sections of a course may have the Speaking Intensive (SI) or Writing Intensive (WI) attributes. These designations for a course are dependent on instructor and semester, and are listed in the Banner description for the semester in which you are registering.*

***This particular course is in a discipline that allows students with demonstrated competence upon admission to UMW (such as AP/IB credit, dual enrollment, etc.) to begin courses at a higher level. Talk to your Student Success Coordinator if you believe you should start at a higher level.*

#Students in the Honors Program should take HONR 100, HIST 201/202HN or FSEM 100HN to fulfill their required first-year Honors coursework. CHEM 112 HN is also available as an option.