

Chemistry Core and Major Requirements (Bachelor of Science) – Catalog Year 2009

| Hrs | Course Requirements | Hrs | Course Requirements | Hrs | Course Requirements |
|-----|---|-----|--|-----|---|
| 6 | Freshmen Composition: <input type="checkbox"/> ENGL 1013 and <input type="checkbox"/> ENGL 1023 | 3 | U.S. History/American Government: <input type="checkbox"/> HIST 2003 or <input type="checkbox"/> HIST 2013 or <input type="checkbox"/> PLSC 2003 | 9 | Fine Arts/World Literature/Philosophy: <i>To be selected from at least two departments</i> Fine Arts: <input type="checkbox"/> ARCH 1003 or LARC 1003 <input type="checkbox"/> ARHS 1003 or ARTS 1003 <input type="checkbox"/> COMM 1003 <input type="checkbox"/> DANC 1003 <input type="checkbox"/> DRAM 1003 <input type="checkbox"/> HUMN 1003 <input type="checkbox"/> MLIT 1003 World Literature: <input type="checkbox"/> WLIT 1113 <input type="checkbox"/> WLIT 1123 (<i>WLIT 1113</i>), a foreign language literature course, any other WLIT course. Philosophy: <input type="checkbox"/> PHIL 2003 <input type="checkbox"/> PHIL 2103 <input type="checkbox"/> PHIL 2203 |
| 0-3 | Advanced Composition: <input type="checkbox"/> ENGL 2003 or <input type="checkbox"/> ENGL 2013 <i>Exemption may be granted by:</i> 1) grade of at least "B" in ENGL 1013 and "A" in ENGL 1023 taken at the U of A, or 2) passing exemption exam | 3 | Social Science: <input type="checkbox"/> ANTH 1023 <input type="checkbox"/> ECON 2013 (<i>Math 1203</i>) or ECON 2143 <input type="checkbox"/> GEOG 2003 <input type="checkbox"/> PSYC 2003 <input type="checkbox"/> SOCI 2013 or SOCI 2033 | | |
| 0-9 | Foreign Language ¹ : <i>See advisor for placement</i> <input type="checkbox"/> Completion of the Intermediate I level (2003) in a single language. | 18 | Science and Mathematics: To be determined by the department of major and to be selected from at least two departments other than the department of the major. | | |
| 6 | Western or World Civilization: <input type="checkbox"/> HIST 1003 or HIST 1113 <input type="checkbox"/> HIST 1013 or HIST 1123 | | | | |

Course prerequisites in parentheses

**See Catalog of Studies and/or advisor for prerequisite information.

Major Requirements for Chemistry:

- ❖ A minimum of forty hours in Chemistry including (see also cognate math/science requirements below):
 - CHEM 1213/1211L Chemistry for Majors I AND CHEM 1223/1221L Chemistry for Majors II (*CHEM 1213/1211L or CHEM 1103/1101L*)
 - OR
 - CHEM 1103/1101L University Chemistry I (*MATH 1203*) AND CHEM 1123/1121L University Chemistry II (*CHEM 1103, MATH 1203*)
 - CHEM 2262 Analytical Chemistry Lecture (*CHEM 1123/1121L or CHEM 1074/1071L, MATH 1203*)
 - CHEM 2272 Analytical Chemistry Laboratory (*CHEM 1123/1121L or CHEM 1074/1071L, MATH 1203; Pre or Co-req: CHEM 2262*)
 - CHEM 3504 Physical Chemistry (*CHEM 1123/1121L, PHYS 2074, Pre or Co-req: MATH 2564*)
 - CHEM 3514/3512L Physical Chemistry II (*CHEM 3504*)
 - CHEM 3703/3702L Organic Chemistry I for Majors(*CHEM 1123/1121L*)
 - CHEM 3713/3712L Organic Chemistry II for Majors(*CHEM 1123/1121L*)
 - CHEM 4123 Advanced Inorganic Chemistry I (*CHEM 3514*)
 - CHEM 4213/4211L Instrumental Analysis (*CHEM 2262, CHEM 2272; CHEM 3613/3611L or CHEM 3713/3712L; CHEM 3514 or CHEM 3453*)
 - CHEM 4723 Experimental Methods in Organic and Inorganic Chemistry (*CHEM 3504, 3514, & CHEM 3613/3611L or CHEM 3713/3712*)
 - At least one additional advanced lecture course with CHEM 3514 Physical Chemistry II as a prerequisite

Additional math and science requirements:

A minimum of 18 hours of science outside of chemistry and including mathematics through MATH 2574 and physics through PHYS 2074 are required. These mathematics and physics courses are prerequisites for some advanced courses and should be scheduled early in the student's program. Some work in the biological sciences is recommended. This program meets the minimum requirements for certification by the American Chemical Society if CHEM 3813 (or CHEM 5813/5843) is included.

Mathematics:

- MATH 2554 Calculus I MATH 2564 Calculus II MATH 2574 Calculus III

Physics:

- PHYS 2054 University Physics I PHYS 2074 University Physics II

¹Prerequisite determined by number of high school language units completed and placement score. Fulbright College students receive no credit for 1003 unless they have satisfied the College entrance requirement (2 years of a high school foreign language with another foreign language).

| Electives | | |
|-----------|--|--|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

| Progress Check (Graduation Credit Hours Only) [†] | | | | | | | | | | | | |
|--|-----|--------|-----|---|---------|---------|---------|---------|---------|---------|--|--|
| Sem | Hrs | Sem | Hrs | Rule | Cum Hrs | Cum Hrs | Cum Hrs | Cum Hrs | Cum Hrs | Cum Hrs | | |
| Sem 1 | | Sem 9 | | 8 hr | | | | | | | | |
| Sem 2 | | Sem 10 | | 24 hr | | | | | | | | |
| Sem 3 | | Sem 11 | | (24 cont) | | | | | | | | |
| Sem 4 | | Sem 12 | | 40 hr | | | | | | | | |
| Sem 5 | | Sem 13 | | (40 cont) | | | | | | | | |
| Sem 6 | | Sem 14 | | (40 cont) | | | | | | | | |
| Sem 7 | | Sem 15 | | 68 hr | | | | | | | | |
| Sem 8 | | Sem 16 | | 124 minimum hrs required for graduation | | | | | | | | |

- ❖ For more information on Chemistry, contact the Department of Chemistry/Biochemistry:
 - CHEM 119 ▪ 479-575-4648 ▪ chemistry.uark.edu

This form is NOT a substitute for the Catalog of Studies. Students should verify this information with their advisor, their degree audit, and the Catalog of Studies.

[†]See Graduation Checksheet at <http://fcac.uark.edu/degreeplanning/checksheets.php> for more information on degree requirements.