CHEMISTRY MAJOR (2018 Catalog)
Bachelor of Science Degree – ACS Certified
126 Semester Hours Minimum

Name _____

Campus Address _____ Phone _____

Second Major _____ Minor 1 _____ Minor 2 _____

Transferred _____ credits from _____ Advisor _____

**Chemistry Courses**

| | | |
|---|---|---|
| CHEM 1110 | General Chemistry I | 4 ____ |
| CHEM 1120 | General Chemistry II | 4 ____ |
| | OR | |
| CHEM 1130 | Gen. Chemistry I-II | 5 ____ |
| CHEM 2110 | Descriptive Inorg Chem | 4 ____ |
| CHEM 2210 | Organic Chemistry I | 3 ____ |
| CHEM 2220 | Organic Chemistry II | 3 ____ |
| CHEM 2230 | Organic Chem. Lab | 2 ____ |
| CHEM 2310 | Chromatog. and Quant. | 4 ____ |
| CHEM 4010 | Chemical Safety | 1 ____ |
| CHEM 4310 | Instrumental Analysis | 4 ____ |
| CHEM 4420 | Physical Chemistry I | 3 ____ |
| CHEM 4430 | Physical Chemistry II | 3 ____ |
| CHEM 4440 | Physical Chem. Lab | 2 ____ |
| CHEM 4510 | Biochemistry I | 3 ____ |
| CHEM 4110 | Inorganic Chemistry | 3 ____ |
| CHEM 4610 | Adv. Synthesis Lab | 2 ____ |
| CHEM3600 | Undergraduate Research | 2 ____ |

**Elective**

3000/4000 level Chemistry course 3____

**Math and Physics Courses**

| | | |
|---|---|---|
| MATH 1420 | Calculus I | 4 ____ |
| MATH 1421 | Calculus II | 4 ____ |
| PHYSICS 1701 | Physics I | 4 ____ |
| PHYSICS 1702 | Physics II | 4 ____ |
| | OR | |
| PHYSICS 1511 | General Physics I | 4 ____ |
| PHYSICS 1512 | General Physics II | 4 ____ |

**Total: 63-66 hours**

**Liberal Arts Core**

***Category I: Core Competencies*** ***(12 hrs)***

_____ A. Reading and Writing 3 hrs
_____ B. Speaking and Listening 3 hrs
__x__ C. Quantitative Techniques 3 hrs
Satisfied by MATH 1420 4 hrs
_____ D. Dimensions of Wellbeing 2 hrs

***Category 2: Civilizations and Cultures*** ***(9 hrs)***

_____ A. Humanities (take 2 of I, II, and III)
_____ 3 hrs
_____ 3 hrs
_____ B. Non-Western Cultures 3 hrs

***Category 3: Fine Arts, Literature, Philosophy and Religion*** ***(6 hrs)***

_____ A. Fine Arts 3 hrs
_____ B. Lit, Philosophy, or Religion 3 hrs

***Category 4: Natural Science and Technology*** ***(7 hrs)***

_____ A. Life Sciences 3 hrs
__x__ B. Physical Sciences 4 hrs
Satisfied by CHEM 1110 or CHEM 1130

***Category 5: Social Science*** ***(9 hrs)***

_____ A. Soc. & Historical Perspectives 3 hrs
_____ B. Individual & Institutional Perspectives 3 hrs
_____ C. Diversity & Global Issues 3 hrs

***Category 6: Capstone*** ***(2 hrs)***

_____ Capstone

**7 hours satisfied**
**37 hours needed**

SAMPLE PLAN OF STUDY FOR THE B.S. MAJOR IN CHEMISTRY
An average of 15.75 credits per semester is needed to graduate in 8 semesters

## FRESHMAN YEAR

| FALL | | | SPRING | | |
|---|---|---|---|---|---|
| CHEM1110 | General Chemistry I | 4 | CHEM 1120 | General Chemistry II | 4 |
| MATH 1420 | Calculus I | 4 | MATH 1421 | Calculus II | 4 |
| | Liberal Arts | 6 | | Liberal Arts | 6 |
| | | 14 | | | 14 |

## SOPHOMORE YEAR

| FALL | | | SPRING | | |
|---|---|---|---|---|---|
| CHEM 2210 | Organic Chemistry I | 3 | CHEM 2220 | Organic Chemistry II | 3 |
| CHEM 2310 | Chromatog. and Quant. Analysis | 4 | CHEM 2230 | Organic Chemistry Laboratory | 2 |
| PHYSICS 1701 | Physics I | 4 | CHEM 2110 | Descriptive Inorganic Chemistry | 4 |
| | Liberal Arts | 6 | PHYSICS 1702 | Physics II | 4 |
| | | 17 | | Liberal Arts/Electives | 3 |
| | | | | | 16 |

## JUNIOR YEAR

| FALL | | | SPRING | | |
|---|---|---|---|---|---|
| CHEM 4420 | Physical Chemistry I | 3 | CHEM 4430 | Physical Chemistry II | 3 |
| CHEM 4310 | Instrumental Analysis | 4 | CHEM 4440 | Physical Chemistry Laboratory | 2 |
| CHEM 4510 | Biochemistry I | 3 | CHEM 4110 | Inorganic Chemistry | 3 |
| | Liberal Arts/ Electives | 6 | CHEM 4010 | Chemical Safety | 1 |
| | | 16 | | Liberal Arts/Electives | 7 |
| | | | | | 16 |

## SENIOR YEAR

| FALL | | | SPRING | | |
|---|---|---|---|---|---|
| CHEM 4610 | Advanced Synthesis Laboratory | 2 | CHEM 3600 | Undergraduate Research | 1 |
| CHEM 3600 | Undergraduate Research | 1 | 3000/4000 level | Chemistry Elective | 3 |
| | Liberal Arts/Electives | 14 | | Liberal Arts/Electives | 12 |
| | | 17 | | | 16 |

| | Total Hours |
|---|---|
| Liberal Arts | 37 hours |
| Major | 63-66 hours |
| University Electives/Minor | 23-26 hours |
| | 126 hours minimum |

ADVISING NOTE: This is a sample plan of study only. There are a variety of alternative schedules for completing the B.S. Chemistry. Please consult with an advisor in the Department of Chemistry and Biochemistry to plan a schedule tailored for your needs.