

CHEMISTRY MAJOR CURRICULUM AT TUSKEGEE UNIVERSITY (Under Revision)

| Freshman Year | | | | | |
|--------------------------------|-------------------------|---------------|--------------------------------|--------------------------|---------------|
| 1st Semester | | | 2nd Semester | | |
| COURSE | DESCRIPTION | CREDIT | COURSE | DESCRIPTION | CREDIT |
| CHEM 231 | General Chemistry I | 4 | CHEM 232 | General Chemistry II | 4 |
| CHEM 233 | General Chemistry Lab I | 1 | CHEM 234 | General Chemistry Lab II | 1 |
| ¹ ENGL 101 | English | 3 | ¹ ENGL 102 | English | 3 |
| HIST 103 | History | 3 | HIST 104 | History | 3 |
| ² MATH 207 | Calculus I | 4 | MATH 208 | Calculus II | 4 |
| UNIV 101 | Orientation | 1 | UNIV 102 | Orientation | 1 |
| PHED | Physical Education | 1 | PHED | Physical Education | 1 |
| TOTAL | | 17 | TOTAL | | 17 |

| Sophomore Year | | | | | |
|--------------------------------|----------------------------|---------------|--------------------------------|---------------------------|---------------|
| 1st Semester | | | 2nd Semester | | |
| COURSE | DESCRIPTION | CREDIT | COURSE | DESCRIPTION | CREDIT |
| CHEM 237 | Inorganic Chemistry | 3 | CHEM 307 | Quantitative Analysis | 3 |
| CHEM 238 | Inorganic Chemistry Lab | 1 | CHEM 308 | Quantitative Analysis Lab | 2 |
| PHYS 310 | General Physics I | 3 | CHEM 320 | Organic Chemistry I | 3 |
| PHYS 313 | General Physics Lab I | 1 | CHEM 322 | Organic Chemistry I Lab | 2 |
| | | | PHYS 311 | General Physics II | 3 |
| MATH 209 | Calculus III | 4 | PHYS 314 | General Physics Lab II | 1 |
| Elective | Social/Behavioral Sciences | 3 | Elective | Humanities/Fine Arts | 3 |
| TOTAL | | 15 | TOTAL | | 17 |

| Junior Year | | | | | |
|--------------------------------|--------------------------|---------------|--------------------------------|---------------------------|---------------|
| 1st Semester | | | 2nd Semester | | |
| COURSE | DESCRIPTION | CREDIT | COURSE | DESCRIPTION | CREDIT |
| CSCI 205 or CSCI 229 | Computer Science | 3 | CHEM 402 | Physical Chemistry II | 3 |
| CHEM 401 | Physical Chemistry I | 3 | CHEM 402 | Physical Chemistry II Lab | 2 |
| CHEM 403 | Physical Chemistry Lab I | 2 | 2d Option | Lecture or Lecture/Lab | 4 |
| 2d Option | Lecture or Lecture/Lab | 4 | Elective | Humanities/Fine Arts | 2-3 |
| CHEM 321 | Organic Chemistry II | 3 | Elective | Social Science/Humanities | 3 |
| CHEM 323 | Organic Chemistry II Lab | 2 | CHEM 399 | Undergraduate Research | 1-3 |
| TOTAL | | 17 | TOTAL | | 15-18 |

| Senior Year | | | | | |
|--------------------------------|----------------------------|---------------|--------------------------------|------------------------|---------------|
| 1st Semester | | | 2nd Semester | | |
| COURSE | DESCRIPTION | CREDIT | COURSE | DESCRIPTION | CREDIT |
| ³ Elective | Advanced Chemistry | 1-3 | ³ Elective | Advanced Chemistry | 1-3 |
| ³ CHEM 541 | Instrumental Analysis | 3 | ³ CHEM 513 | Advanced Inorganic | 3 |
| 2d Option | Lecture or Lecture/Lab | 4 | Elective | Fine Arts/Humanities | 3 |
| CHEM 551 | Chemistry Seminar | 1 | 2d Option | Lecture or Lecture/Lab | 4 |
| Elective | Social/Behavioral Sciences | 3 | CHEM 552 | Chemistry Seminar | 1 |
| CHEM 499 | Undergraduate Research | 1-3 | ⁴ Elective | Technical Elective | 3 |
| TOTAL | | 13-17 | TOTAL | | 15-17 |

¹ - A minimum grade of "C" is required

² - Initial mathematics placement will be determined by ACT/SAT scores

³ - Courses only required for students completing the ACS. Approved Degree.

For certification by the American chemical Society, a student must pass CHEM 513, CHEM 541, the equivalent of 3 semester hours of biochemistry and an additional six credit hours of advanced chemistry (e.g., undergraduate research and/or specified 500-level courses). A student may choose to take six credit hours of advanced physics or six credit hours of advanced mathematics or a combination of these subjects as a replacement for advanced chemistry

⁴ - If necessary, College approved electives required to complete the 120 semester hours required for graduation