CHEMISTRY - MINOR

Students seeking a minor in chemistry must complete the Declaration of Minor in Chemistry form and have it approved by the undergraduate advisor in chemistry (Room 104 Chemistry) and their academic advisor. A minor in Chemistry should represent course work taken in the discipline beyond courses that might be used to satisfy core curriculum science requirements (8 credits). Therefore, though CHEM 101/CHEM 111 or CHEM 107 and CHEM 102/CHEM 112 are prerequisites to all of the listed courses, they are not considered part of the minor program. The course work listed (17-20 credits) represents various sub-disciplines within the field of Chemistry and would give the student an overall knowledge base fitting a Minor in Chemistry. This is consistent with the statement on minors published by the American Chemical Society.

Program Requirements

The student will choose FIVE lecture courses (14-15 credits) and THREE laboratory courses (3-5 credits) from categories A.-E. below. The student must take at least one course from FOUR of the FIVE categories. Students must have a C average in all courses taken for a minor in Chemistry. CHEM 491 and CHEM 485 credits will not be allowed to count for the minor nor used in the Chemistry GPA calculation. Substitution of courses without the CHEM prefix will not be allowed.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Semester Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Organic Chemistry</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 227</td>
<td>Organic Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 237</td>
<td>Organic Chemistry Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 228</td>
<td>Organic Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 238</td>
<td>Organic Chemistry Laboratory</td>
<td>1</td>
</tr>
<tr>
<td><strong>B. Analytical Chemistry</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 315</td>
<td>Fundamentals of Quantitative Analysis</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 316</td>
<td>Quantitative Analysis</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 318</td>
<td>Quantitative Analysis Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 320</td>
<td>Instrumental Analysis Laboratory</td>
<td>2</td>
</tr>
<tr>
<td><strong>C. Physical Chemistry</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 322</td>
<td>Physical Chemistry for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 325</td>
<td>Physical Chemistry Laboratory I</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 326</td>
<td>Physical Chemistry Laboratory II</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 327</td>
<td>Physical Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 328</td>
<td>Physical Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td><strong>D. Inorganic Chemistry</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 220/ MSEN 220</td>
<td>Physics and Chemistry of Inorganic Materials</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 362</td>
<td>Descriptive Inorganic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 383</td>
<td>Chemistry of Environmental Pollution</td>
<td>3</td>
</tr>
<tr>
<td><strong>E. Advanced Chemistry</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 415</td>
<td>Analytical Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 433</td>
<td>Advanced Inorganic Chemistry Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 434</td>
<td>Analytical Instrumentation Laboratory</td>
<td>2</td>
</tr>
</tbody>
</table>

1. Students may not count both CHEM 315 and CHEM 316
2. Students may not count both CHEM 322 and CHEM 327