MINOR PROGRAM IN CHEMISTRY

Chemistry Minor – 23 units
A minimum of 23 units of Chemistry are required to qualify for a minor in chemistry. Ten of the 23 units must be upper-division, with at least six of those units taken at SF State. Courses from community colleges cannot be used to meet the upper division unit requirement for the minor.

All courses must be completed with grades of C- or better (CR/NC grading is not accepted).

Required Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 115</td>
<td>General Chemistry I: Essential Concepts of Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 215 &amp; CHEM 216</td>
<td>General Chemistry II: Quantitative Applications of Chemistry Concepts and General Chemistry II Laboratory: Quantitative Applications of Chemistry Concepts</td>
<td>5</td>
</tr>
</tbody>
</table>

Only one course from each of the following pairs can be counted towards the minor:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>CHEM 130</td>
<td>General Organic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>or CHEM 233</td>
<td>Organic Chemistry I</td>
<td></td>
</tr>
<tr>
<td>CHEM 349</td>
<td>General Biochemistry</td>
<td>3</td>
</tr>
<tr>
<td>or CHEM 340</td>
<td>Biochemistry I</td>
<td></td>
</tr>
</tbody>
</table>

The following courses cannot be counted toward the minor:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>CHEM 100</td>
<td>Preparation for Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 101</td>
<td>Survey of Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 102</td>
<td>Survey of Chemistry Laboratory</td>
<td>1</td>
</tr>
</tbody>
</table>