# ASTRONOMY MINOR

The Department of Physics and Astronomy offers a minor in astronomy to qualified students. The requirement for a minor consists of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHY 2170</td>
<td>University Physics for Scientists I 1</td>
<td>4</td>
</tr>
<tr>
<td>or PHY 2130</td>
<td>Physics for the Life Sciences</td>
<td></td>
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<tr>
<td>PHY 2171</td>
<td>University Physics Laboratory 1</td>
<td>1</td>
</tr>
<tr>
<td>or PHY 2131</td>
<td>Physics for the Life Sciences Laboratory</td>
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</tr>
<tr>
<td>PHY 2180</td>
<td>University Physics for Scientists II 1</td>
<td>4</td>
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<tr>
<td>or PHY 2140</td>
<td>Physics for the Life Sciences II</td>
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<tr>
<td>PHY 2181</td>
<td>University Physics Laboratory II 1</td>
<td>1</td>
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<tr>
<td>or PHY 2141</td>
<td>Physics for the Life Sciences Laboratory</td>
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<tr>
<td>PHY 3300</td>
<td>Introductory Modern Physics 3</td>
<td>3</td>
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<tr>
<td>PHY 3310</td>
<td>Introductory Modern Physics Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>Select three courses from the following:</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>AST 4100</td>
<td>Astronomical Techniques 2</td>
<td></td>
</tr>
<tr>
<td>AST 4300</td>
<td>Planetary Astronomy and Space Science</td>
<td></td>
</tr>
<tr>
<td>AST 5010</td>
<td>Astrophysics and Stellar Astronomy</td>
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</tr>
<tr>
<td>AST 5100</td>
<td>Galaxies and the Universe</td>
<td></td>
</tr>
</tbody>
</table>

| Total Credits | 24 |

1. If students take PHY 2130 and PHY 2140 then they must earn a cumulative 3.0 g.p.a. in those courses to be able to take PHY 3300.
2. If students choose to take AST 4100 as one of the elective upper-level astronomy classes, then, AST 4200 is a co-requisite.
3. MAT 2010 and MAT 2020 are prerequisites for this course.

Many science and/or engineering majors already take the required calculus and basic physics sequence as part of their studies, however, non-science majors are unlikely to be able to complete the minor in under 24 credits. Students should consult the departmental Undergraduate Academic Advisor for approval of the minor prior to undertaking the program.