Astronomy

ASTR 122  **Stars and Galaxies**  credit: 3 hours.
Introduction to celestial objects and phenomena beyond the Solar System, and their governing basic physical principles; galaxies, quasars, and structure of the universe; dark matter and dark energy; the Big Bang and the fate of the universe; the Milky Way; the interstellar medium and the birth of stars; stellar distances, motions, radiation, structure, evolution, and remnants, including neutron stars and black holes. Emphasis will be placed on problem-solving and scientific methods. Credit is not given for ASTR 122 if credit in either ASTR 100 or ASTR 210 has been earned. Students with credit in PHYS 211 are encouraged to take ASTR 210.

ASTR 121 and ASTR 122 cover the same topics as ASTR 100, but the material and topics are covered in much more depth over two semesters instead of one. ASTR 121 and ASTR 122 are independent offerings and can be taken in any order. While ASTR 121 and ASTR 122 are for non-science majors, problems solving with basic algebra is required. Science and astronomy majors should take ASTR 210.

This course satisfies the General Education Criteria for a:
Quantitative Reasoning II
Nat Sci & Tech - Phys Sciences

<table>
<thead>
<tr>
<th>CRN</th>
<th>Type</th>
<th>Section</th>
<th>Time</th>
<th>Days</th>
<th>Location</th>
<th>Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>39753</td>
<td>Discussion/Recitation</td>
<td>AD1</td>
<td>09:00 AM - 09:50 AM</td>
<td>R</td>
<td>214 - Ceramics Building</td>
<td>Archipley, M Dunne, B</td>
</tr>
<tr>
<td>39754</td>
<td>Discussion/Recitation</td>
<td>AD2</td>
<td>10:00 AM - 10:50 AM</td>
<td>R</td>
<td>214 - Ceramics Building</td>
<td>Archipley, M Dunne, B</td>
</tr>
<tr>
<td>39755</td>
<td>Discussion/Recitation</td>
<td>AD3</td>
<td>11:00 AM - 11:50 AM</td>
<td>R</td>
<td>214 - Ceramics Building</td>
<td>Archipley, M Dunne, B</td>
</tr>
<tr>
<td>39756</td>
<td>Discussion/Recitation</td>
<td>AD4</td>
<td>12:00 PM - 12:50 PM</td>
<td>R</td>
<td>214 - Ceramics Building</td>
<td>Dunne, B Wagner, C</td>
</tr>
<tr>
<td>39748</td>
<td>Discussion/Recitation</td>
<td>AD5</td>
<td>01:00 PM - 01:50 PM</td>
<td>R</td>
<td>214 - Ceramics Building</td>
<td>Dunne, B Wagner, C</td>
</tr>
<tr>
<td>39749</td>
<td>Discussion/Recitation</td>
<td>AD6</td>
<td>02:00 PM - 02:50 PM</td>
<td>R</td>
<td>214 - Ceramics Building</td>
<td>Dunne, B Wagner, C</td>
</tr>
<tr>
<td>62314</td>
<td>Discussion/Recitation</td>
<td>AD8</td>
<td>10:00 AM - 10:50 AM</td>
<td>R</td>
<td>134 - Astronomy Building</td>
<td>Dunne, B</td>
</tr>
</tbody>
</table>

Nat Sci & Tech - Phys Sciences, and Quantitative Reasoning II course.
Nat Sci & Tech - Phys Sciences, and Quantitative Reasoning II course.