University of Hawai‘i at Mānoa – Four-Year Academic Plans 2010-2011
College of Tropical Agriculture and Human Resources
Bachelor of Science (BS) in Plant and Environmental Biotechnology
Specialization: General Biotechnology

This is only a sample academic plan. Students should meet with an academic advisor prior to registration to formulate their own plan.

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall:</strong></td>
<td><strong>Fall:</strong></td>
<td><strong>Fall:</strong></td>
<td><strong>Fall:</strong></td>
</tr>
<tr>
<td>CHEM 161 (DP)</td>
<td>CHEM 272</td>
<td>MBBE 402</td>
<td>MBBE/PEPS/TPSS 499</td>
</tr>
<tr>
<td>CHEM 161L (DY)</td>
<td>CHEM 272L</td>
<td>MBBE 402L</td>
<td>NI</td>
</tr>
<tr>
<td>BIOL 171 (DB)</td>
<td>BIOL 215 or 241 (FS)</td>
<td>ANSC 446, PEPS 371</td>
<td>NI</td>
</tr>
<tr>
<td>BIOL 171L</td>
<td>MBBE 304</td>
<td>or BIOL 375</td>
<td>PEPS Elective</td>
</tr>
<tr>
<td>HSL 101 or Alternative</td>
<td></td>
<td>MBBE/PEPS/TPSS 499</td>
<td>PEPS Elective</td>
</tr>
<tr>
<td>FW</td>
<td>HSL 201 or Alternative</td>
<td></td>
<td>PEPS Elective</td>
</tr>
<tr>
<td>Credits</td>
<td>14</td>
<td>Credits</td>
<td>16</td>
</tr>
<tr>
<td><strong>Spring:</strong></td>
<td><strong>Spring:</strong></td>
<td><strong>Spring:</strong></td>
<td><strong>Spring:</strong></td>
</tr>
<tr>
<td>CHEM 162</td>
<td>PHYS 100/100L or 151/151L and 152/152L</td>
<td>MBBE 401</td>
<td>MBBE/PEPS/TPSS 499</td>
</tr>
<tr>
<td>CHEM 162L</td>
<td>BIOL 275</td>
<td>MBBE 420</td>
<td>NI</td>
</tr>
<tr>
<td>BIOL 172</td>
<td>BIOL 275L</td>
<td>BIOL 407</td>
<td>PEPS Elective</td>
</tr>
<tr>
<td>BIOL 172L</td>
<td>NREM 310</td>
<td>DA/DH/ DL</td>
<td>PEPS Elective</td>
</tr>
<tr>
<td>NREM 220 (DS)</td>
<td>HSL 202 or Alternative</td>
<td></td>
<td>DS</td>
</tr>
<tr>
<td>HSL 102 or Alternative</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Credits</td>
<td>14</td>
<td>Credits</td>
<td>14</td>
</tr>
<tr>
<td><strong>Summer:</strong></td>
<td><strong>Summer:</strong></td>
<td><strong>Summer:</strong></td>
<td><strong>Summer:</strong></td>
</tr>
<tr>
<td>FG (A/B/C)</td>
<td>Elective</td>
<td>Elective</td>
<td></td>
</tr>
<tr>
<td>FG (A/B/C)</td>
<td>Elective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Credits</td>
<td>6</td>
<td>Credits</td>
<td>15</td>
</tr>
<tr>
<td><strong>Total Credits:</strong></td>
<td><strong>Total Credits:</strong></td>
<td><strong>Total Credits:</strong></td>
<td><strong>Total Credits:</strong></td>
</tr>
<tr>
<td>34</td>
<td>69</td>
<td>97</td>
<td>128</td>
</tr>
</tbody>
</table>

**Notes:**
- Students must take placement exams to be able to register for CHEM 161 and MATH 215 or 241.
- Students must take 18 credits in General Biotechnology from the following: CHEM 273/273L; MICR 351/351L; MICR 461, MICR 475, MICR 485/485L; OCN 310; PEPS/MBBE 403, PEPS/MBBE 404; PEPS 470; TPSS 440, TPSS 453; or MBBE/PEPS/TPSS 499 credits beyond 3.
- Students may substitute major courses that are no longer offered; see a PEB advisor for more details.
- Students must incorporate all focus requirements into this plan.

v. HA 7/1/2010