## San Diego State University
### Preparation-for-Major Courses
#### Biology, B.S.
In preparation for the Single Subject Teaching Credential in Science / Biological Sciences

<table>
<thead>
<tr>
<th>SDSU COURSE</th>
<th>SDSU COURSE TITLE</th>
<th>SDCCD COURSE</th>
<th>UNITS</th>
<th>CITY</th>
<th>MESA</th>
<th>MIRA</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 203 and BIOL 203L</td>
<td>PRINCIPLES OF CELL AND MOLECULAR BIOLOGY AND LAB</td>
<td>BIOL 210A*</td>
<td>4</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>BIOL 204 and BIOL 204L</td>
<td>PRINCIPLES OF ORGANISMAL BIOLOGY AND LAB</td>
<td>BIOL 210B* or BIOL 215* and BIOL 250*</td>
<td>4-8</td>
<td>X</td>
<td>N/A</td>
<td>X</td>
</tr>
<tr>
<td>BIOL 215</td>
<td>BIOSTATISTICS</td>
<td>BIOL 200*</td>
<td>3</td>
<td>X</td>
<td>X</td>
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<tr>
<td>CHEM 200</td>
<td>GENERAL CHEMISTRY</td>
<td>CHEM 200** and CHEM 200L**</td>
<td>3</td>
<td>X</td>
<td>X</td>
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<tr>
<td>CHEM 201</td>
<td>GENERAL CHEMISTRY</td>
<td>CHEM 201** and CHEM 201L**</td>
<td>3</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>CHEM 232</td>
<td>ORGANIC CHEMISTRY</td>
<td>CHEM 231*</td>
<td>3</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>CHEM 232L</td>
<td>ORGANIC CHEMISTRY LAB</td>
<td>CHEM 231L*</td>
<td>2</td>
<td>X</td>
<td>X</td>
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</tr>
<tr>
<td>MATH 121</td>
<td>CALCULUS FOR THE LIFE SCIENCES I</td>
<td>MATH 121*</td>
<td>3</td>
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<td>X</td>
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</tr>
<tr>
<td>MATH 122</td>
<td>CALCULUS FOR THE LIFE SCIENCES II</td>
<td>MATH 122*</td>
<td>3</td>
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<td>X</td>
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<td>PHYS 180A and PHYS 182A</td>
<td>FUNDAMENTALS OF PHYSICS and PHYSICAL MEASUREMENTS</td>
<td>PHYS 180A* and PHYS 181A* or PHYS 125*</td>
<td>5</td>
<td>X</td>
<td>N/A</td>
<td>X</td>
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<tr>
<td>PHYS 180B and PHYS 182B</td>
<td>FUNDAMENTALS OF PHYSICS and PHYSICAL MEASUREMENTS</td>
<td>PHYS 180B* and PHYS 181B* or PHYS 126*</td>
<td>5</td>
<td>X</td>
<td>N/A</td>
<td>X</td>
</tr>
</tbody>
</table>

+ Both lecture and lab courses must be completed prior to transfer to receive credit for SDSU’s course.

* Course also fulfills general education requirement(s) for the CSU GE or IGETC pattern

**TOTAL UNITS: 39-46**

### Transfer Admission Eligibility *

All transfer applicants must meet the following requirements to be considered for admission:
- Complete a minimum of 60 CSU-transferable semester units.
- Complete General Education (GE) requirements in written communication, oral communication, critical thinking, and mathematics with a “C” or higher in each course.

**CONTINUED ON THE OTHER SIDE**

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* NOTE: This planning guide is based on existing articulation agreements and the SDSU 2011-2012 catalog; it is subject to change by the receiving university. For more information, please see a counselor, consult the SDSU catalog, reference www.assist.org, and/or contact the SDSU department at (619) 594-6442.

Updated 09/11
• Earn a minimum 2.60 cumulative CSU-transferable GPA. Applicants must meet this GPA at the
time of application and must maintain the GPA prior to transfer.
• Be in good standing at the last college or university attended.
Applicants who meet the requirements listed above will be ranked based on the completion of lower
division General Education and preparation for the major coursework. Out-of-service area applicants will
be selected based on a GPA ranking that may be higher than the major GPA. Visit
www.sdsu.edu/admissions for details.

Impacted Major Entrance Criteria

In order to be admitted to this major at SDSU, students must meet both the transfer admission eligibility
requirements listed above and also the following impacted major entrance criteria:
• Complete with a minimum 2.70 GPA and a “C” or higher all major preparation courses listed
above. These cannot be taken credit/no credit.
Students who do not meet the impacted major entrance criteria prior to transfer will be required to
complete these requirements at SDSU prior to enrolling in any upper division courses in the major.

Notes
• Time Limitation: All courses for the major must be completed within seven years of the granting of the
undergraduate degree. Exceptions for individual courses must be approved by the SDSU Biology
Department and be filed with the SDSU Office of Advising and Evaluations. Contact the SDSU
Biology Department at (619) 594-6442 for questions.
• Additional lower division courses. In addition to the preparation for major courses listed above and
upper division course requirements, students seeking certification of subject matter competency in
Biology / Biological Sciences for the Single Subject Teaching Credential by coursework must
complete the following lower division courses:
  o SDSU’s GEOL 101 (GEOL 101 at City, Mesa, and Miramar College)
  o SDSU’s GEOL 104 (GEOL 104 at City, Mesa, and Miramar College)
  o SDSU’s TE 211 (no articulated course)
  o SDSU’s TE 280 (HEAL 190 at City, Mesa, and Miramar College)
These courses may be completed either before or after transfer.