The Associate in Science in Biology for Transfer Degree introduces the concepts and principles upon which biologic knowledge is based including the biochemistry, structure and function, ecology and evolution of organisms, from the levels of cells through the biosphere. Students will develop skills for critical/analytical thinking, perceptive reading/observation and interpretation. The Associate in Science in Biology for Transfer degree provides students with a core curriculum that will prepare them with the knowledge and skills required to earn a baccalaureate degree in biology. The intent of this degree is to assist students in seamlessly transferring to a California State University.

Required Courses (32 units)  

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO-60* Introduction to Molecular and Cellular Biology</td>
<td>5</td>
</tr>
<tr>
<td>BIO-61* Introduction to Organismal and Population Biology</td>
<td>5</td>
</tr>
<tr>
<td>CHE-1A* General Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>CHE-1B* General Chemistry II</td>
<td>5</td>
</tr>
<tr>
<td>MAT-1A* Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>PHY-2A* General Physics I</td>
<td>4</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>PHY-2B* General Physics II</td>
<td>4</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>PHY-4A* Mechanics</td>
<td>4</td>
</tr>
<tr>
<td>AND</td>
<td></td>
</tr>
<tr>
<td>PHY-4B* Electricity and Magnetism</td>
<td>4</td>
</tr>
</tbody>
</table>

*Courses may also be used to fulfill general education requirements for the CSU GE for STEM or IGEC for STEM pattern, please confer with a counselor.

- Complete one Physics sequence as shown below:
  - PHY-2A* General Physics I  | 4
  - AND                      |   
  - PHY-2B* General Physics II | 4
  - OR                       |   
  - PHY-4A* Mechanics         | 4
  - AND                      |   
  - PHY-4B* Electricity and Magnetism | 4

**Course** | **Units**
---|---
ENGL 1A | 4.0
Math 1A | 4.0
CHEM 1A | 5.0
AREA E | 3.0

**Total Units:** 16.0

**Course** | **Units**
---|---
AREA A3 | 3.0
MATH 1B | 4.0
CHEM 1B | 5.0
POL 1 | 3.0

**Total Units:** 15.0

**Course** | **Units**
---|---
BIO 60 | 5.0
AREA A1 | 3.0
ELECTIVE GROUP/LIST A | 4.0
AREA C1 | 3.0

**Total Units:** 15.0

**Course** | **Units**
---|---
BIO 61 | 5.0
ELECTIVE GROUP/LIST A | 4.0
HIS 6/7/14/31/34 | 3.0
AREA D | 3.0

**Total Units:** 15.0

**Suggested Pathway for Biology ADT**

See your counselor for YOUR plan!

10/2019
CSU GE for STEM

Students pursuing certain Associate Degrees for Transfer may be eligible to complete CSU GE for STEM, deferring two lower-division GE courses until after transfer. CSU GE for STEM is applicable only to majors in which the Transfer Model Curriculum explicitly indicates the availability of the option. At Norco College, currently only the ADT in Biology allows CSU GE for STEM.

"CSU GE Breadth for STEM" certification as part of an Associate Degree for Transfer in Biology would require that the student has completed:

a. All courses in Areas A, B, and E of the traditional GE Breadth curriculum; and
b. One course in Area C1 Arts and one course in Area C2 Humanities; and
c. Two courses in Area D from two different disciplines.

IGETC for STEM

Students pursuing certain Associate Degrees for Transfer may be eligible to complete IGETC for STEM, deferring two to three lower-division GE courses until after transfer. IGETC for STEM is applicable only to majors in which the Transfer Model Curriculum explicitly indicates the availability of the option. At Norco College, currently only ADT’s in Biology and Chemistry allow IGETC for STEM.

“IGETC for STEM” certification as part of an Associate Degree for Transfer in Biology would require:

Complete the following courses before transfer:
• All courses in Areas 1 (except 1C for UC-bound students), 2, and 5 of the traditional IGETC; and
• One course in Area 3A; one course in Area 3B; and two courses in Area 4 from two different disciplines.

Complete the following courses after transfer:
• One remaining lower-division general education course in Area 3;*
• One remaining lower-division general education course in Area 4;* and
• One course in Area 6 for UC-bound students who have not satisfied it through proficiency.*

*These deferred lower division courses must be replaced with calculus and/or science courses required by the major before transfer.

Please consult with a Norco College counselor to discuss which general education pattern is the best option for you based on your individual major, goals, and transfer institution.