BIOLOGY

ASSOCIATE DEGREE & CERTIFICATE PROGRAMS

DESCRIPTION
Biology entails the study of the diversity and evolution of life and life processes using the scientific method. The Cuesta College biological sciences program is designed to provide students with an appreciation of the nature, scope and relationships of life forms, as well as an understanding of how biology is applied to medicine, the environment, engineering, and daily life. The program consists of a sequence of courses that prepares students for transfer, field studies, and a variety of career opportunities.

ASSOCIATE DEGREE PROGRAMS
An Associate Degree, depending on the focus of study, is designed to prepare students for transfer into upper division course work in a bachelor’s degree program, or, to prepare students to enter the workforce in a particular vocational field. To qualify for an Associate’s Degree, a student must: (1) complete each major-specific course required for the degree with at least a “C” grade or better, (2) complete all Cuesta College general education, graduation and residency requirements, and (3) achieve an overall grade point average of 2.0 for all courses attempted (major, general education, elective).

DEGREES, CERTIFICATES & AWARDS
• Associate in Science for Transfer (A.S.-T.)
• Associate in Science (A.S.)

CAREER OPPORTUNITIES
• Biochemists and Biophysicists
• Bioinformatics Scientists
• Biological Science Teachers
• Biological Technicians
• Biostatisticians
• Clinical Data Managers
• Clinical Research Coordinators
• Database Architects
• Epidemiologists
• Exercise Physiologists
• Geneticists
• Health Specialties Teachers
• Information Research Scientists
• Life Scientists, All Other
• Medical Scientists
• Microbiologists
• Molecular and Cellular Biologists
• Natural Sciences Managers
• Software Developers, Applications
• Statisticians
• Water Resource Specialists
• Zoologists and Wildlife Biologists

Gainful Employment: Federal regulations require institutions to provide students with Gainful Employment information for specific certificate programs offered at Cuesta College. Information for each certificate program can be found by following this link: www.cuesta.edu/student/studentservices/finaid/gainfulemployment

CONTACT
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Division Assistant: Cathie Babb
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Fax: (805) 546-3232
ASSOCIATE DEGREE FOR TRANSFER PROGRAM

Biology — Associate in Science for Transfer

Required Core: 2 courses (10 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 201A</td>
<td>Biology</td>
<td>5</td>
</tr>
<tr>
<td>BIO 201B</td>
<td>Biology</td>
<td>5</td>
</tr>
</tbody>
</table>

List A: 5 courses (23-25 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 201A</td>
<td>General College Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 201B</td>
<td>General College Chemistry II</td>
<td>5</td>
</tr>
<tr>
<td>MATH 265A</td>
<td>Calculus I</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 205A</td>
<td>General Physics</td>
<td>4</td>
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</tbody>
</table>

List B: 5 courses (23-25 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 201B</td>
<td>General College Chemistry II</td>
<td>5</td>
</tr>
<tr>
<td>MATH 265B</td>
<td>Calculus II</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 205B</td>
<td>General Physics</td>
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</tr>
<tr>
<td>MATH 265C</td>
<td>Calculus III</td>
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</table>

List B: 1 course (3-4 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 236</td>
<td>Introduction To Applied Statistics</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credits: 36-39

"P" (Pass) grade is acceptable for major coursework in the Associate Degrees for Transfer. In addition to major preparation course work listed above, completion of the CSU GE or IGETC pattern is mandatory. Courses completed for the major can also be double counted towards GE, where appropriate. See a counselor for details.

Click Here for Program Student Learning Outcomes

TRANSFER PREPARATION

Courses that fulfill major requirements for an associate degree may differ from those needed to prepare to transfer. Students who plan to transfer to a four-year college or university should schedule an appointment with a Cuesta College counselor to develop a student education plan (SEP) before beginning their program.

TRANSFER RESOURCES:

CSU and UC Articulation Agreements
www.ASSIST.org

CSU System Information:
www2.calstate.edu

FINANCIAL AID

Paying for the cost of a college education requires a partnership among parents, students and the college. As the cost of higher education continues to rise we want you to know that Cuesta College offers a full array of financial aid programs—grants, work study, scholarships, federal loan programs, and fee waivers. These programs are available to both full-and part-time students who are seeking a degree or certificate. For those who qualify, financial aid is available to help with tuition, fees, books and supplies, food, housing, transportation, and childcare. Please log onto our website for additional information:
www.cuesta.edu/student/studentservices/finaid
ASSOCIATE DEGREE PROGRAM

Biological Science — Associate in Science

Required Courses (15 credits)
BIO 201A..... Biology ...........................................5
BIO 201B..... Biology ...........................................5
BIO 204 ..... Microbiology ......................................5

Complete the following group of courses (21-28 credits):
Math 236 or 247
Chem 201A and 201B
Physics 205A and 205B, OR, Physics 208A and 208B and 208C.

MATH 236 ..... Introduction To Applied Statistics .................3
or MATH 247 . Introduction To Statistics ..........................(4)
CHEM 201A .... General College Chemistry I .................5
and CHEM 201B General College Chemistry II ..................5
PHYS 205A ... General Physics ..................................4
and PHYS 205B General Physics ..................................4
or PHYS 208A . PRINCIPLES OF PHYSICS 1 ..................(5)
and PHYS 208B PRINCIPLES OF PHYSICS 2 ..................(5)
and PHYS 208C MODERN PHYSICS ..........................(4)

Total Credits .................................................... 36-43

Click Here for Program Student Learning Outcomes