LIBERAL ARTS, ASSOCIATE IN ARTS (AA): BIO-MEDICAL SCIENCES EMPHASIS

Requirements

Associate Degree Graduation Requirements

Complete all of the following:

1. All Department Requirements listed below with a “C” or better or “P” in each course (at least 20% of the department requirements must be completed through SBCC).

2. One of the following three General Education options:
   a. OPTION 1: A minimum of 18 units of SBCC General Education Requirements (http://articulation.sbcc.edu/sbcc/sbccge.pdf) (Areas A-D) and Institutional Requirements (Area E) and Information Competency Requirement (Area F) OR
   b. OPTION 2: IGETC (http://articulation.sbcc.edu/igetc/igetc.pdf) Pattern OR
   c. OPTION 3: CSU GE Breadth (http://articulation.sbcc.edu/csugb.csuege.pdf) Pattern

3. A total of 60 degree-applicable units (SBCC courses numbered 100 and higher).

4. Maintain a cumulative GPA of 2.0 or better in all units attempted at SBCC.

5. Maintain a cumulative GPA of 2.0 or better in all college units attempted.

6. A total of 12 units through SBCC.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMS 107</td>
<td>Human Anatomy</td>
<td>4</td>
</tr>
<tr>
<td>BMS 108</td>
<td>Human Physiology</td>
<td>4</td>
</tr>
<tr>
<td>BMS 127</td>
<td>Medical Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>BMS 157</td>
<td>General Microbiology</td>
<td></td>
</tr>
<tr>
<td>CHEM 101</td>
<td>Introductory Chemistry</td>
<td>4-5</td>
</tr>
<tr>
<td>CHEM 104</td>
<td>Fundamentals Of General, Organic And Biological Chemistry</td>
<td></td>
</tr>
<tr>
<td>CHEM 155</td>
<td>General Chemistry I</td>
<td></td>
</tr>
<tr>
<td>Select 13 units from the Bio-Medical Sciences Electives list</td>
<td>13</td>
<td></td>
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</tbody>
</table>

Total Units 29.00-30.00

1. Bio-Medical Sciences electives should be carefully selected from the list below in consultation with the Bio-Medical Sciences Faculty Adviser or the Sciences Counselor to avoid problems with transfer. Students intending to transfer with an AA Degree in Liberal Arts: Emphasis in Bio-Medical Sciences should include introductory courses in general and organic chemistry, physics and statistics.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>AH 120</td>
<td>Medical Terminology</td>
<td>1</td>
</tr>
<tr>
<td>ANTH 101</td>
<td>Physical Anthropology</td>
<td>3</td>
</tr>
</tbody>
</table>
Liberal Arts, Associate in Arts (AA): Bio-Medical Sciences Emphasis

- HIT 135  Basic Medical Terminology  3
- HIT 201  Pharmacology For Allied Health  2
- HIT 204  Basic Pathophysiology  3
- HIT 220  HIM Statistics  2
- HIT 265  HIM Computer Applications  3
- MATH 107  Intermediate Algebra  7
- MATH 117  Elementary Statistics  4
or PSY 150  Statistics for the Behavioral Sciences
- MATH 130  Calculus for Biological Sciences, Social Sciences and Business I  5
- MATH 131  Calculus For Biological Sciences, Social Sciences And Business II  3
- MATH 137  College Algebra  5
- MATH 138  Precalculus - College Algebra and Trigonometry  4
- MATH 150  Calculus with Analytic Geometry I  5
- MATH 160  Calculus With Analytic Geometry II  5
- PE 200  Introduction to Kinesiology  3
- PHIL 204  History And Philosophy Of The Great Ideas Of Physics  3
- PHSC 103  The Physical Universe  4
- PHYS 101  Conceptual Physics  3
- PHYS 101L  Conceptual Physics Laboratory  1
- PHYS 102  Introductory Physics For Science Majors  4
- PHYS 105  General Physics  4
- PHYS 106  General Physics  4
- PHYS 110  Introductory Physics  4
- PHYS 111  Introductory Physics  4
- PSY 100  General Psychology  3-4
or PSY 100H  General Psychology, Honors
- PSY 105  Applied Behavior Analysis  2
- PSY 110  Introduction to Physiological Psychology  3
- PSY 115  Psychology Of Health And Effective Behavior  3
- PSY 120  Introduction To Psychology  3
- PSY 125  Psychology Of Human Sexuality  4
- PSY 130  Personality Dynamics And Effective Behavior  3
- PSY 140  Child Development  3
- PSY 145  Human Development  3
- PSY 170  Abnormal Psychology  3
- PSY 175  Social Psychology: Psychological Perspective  3
- SOC 101  Introduction To Sociology  3-4
or SOC 101H  Introduction to Sociology, Honors
- SOC 103  Marriage, Family and Intimacy  3
- SOC 104  Social Psychology  3
- SOC 106  Sociology of Deviance  3
- SOC 109  Social Problems  3
- SOC 113  Sociology Of Sex and Gender  3
- ZOOL 110  Animal Physiology  3
- ZOOL 122  Animal Diversity  3
- ZOOL 123  Animal Diversity Laboratory  1
- ZOOL 140  Animal Behavior  3

**Learning Outcomes**

1. Articulate the principles of evolutionary theory, the history of its development, and the role that evolution plays in the continuity and diversity of life.
2. Communicate the unifying principles governing the organization of organisms from molecules to populations.
3. Explain and apply fundamental ecological principles, from populations to communities through ecosystems, and the geographical distribution of life on Earth.
4. Summarize and illustrate an understanding of the development of the organism from fertilization to the adult form.
5. Compare and contrast organismal diversity and life histories including nomenclature, taxonomy, and systematics.
6. Characterize fundamental metabolic pathways, describe bioenergetics, and relate the interdependence of these pathways.
7. Demonstrate understanding of the structure and function of tissues, organs, and organ systems, describing interrelationships and mechanisms of their integration to support the whole, functioning organism and the underlying causes of dysfunction.
8. Describe and connect the role of DNA in regulating cell activity to its importance as the basis of inheritance, evolution, and biotechnology.
9. Demonstrate proficiency in the basic methods, instrumentation, and quantitative analytical skills used to conduct biological research, including fundamental methods of microscopy, animal and plant dissection, and molecular and cellular biology.
10. Produce original research reports and review papers in a standard scientific format based on laboratory, field experiments, and literature searches that include critical quantitative and qualitative evaluation of data to effectively communicate results, interpretations, and concepts.
11. Evaluate how human populations impact and are impacted by abundance and diversity of other species and the structure and function of ecosystems.
12. Describe the physical environment defining the limits to life on Earth and correlate the physical properties of life that allow it to thrive within these limitations.

**Recommended Sequence**

Make an appointment with your SBCC academic counselor through Starfish to create a Student Education Plan that reflects a recommended course sequence for this program that is tailored to your individual needs.

How to schedule an Academic Counseling appointment (http://www.sbcc.edu/starfish/howtos/starfish_appt_how_to.pdf).