NATURAL HISTORY, ASSOCIATE OF SCIENCE (AS)

Overview

In order to achieve an Associate in Arts Degree, a student must complete a minimum of sixty (60) units of work, which must fulfill General Education, SBCC and department requirements. For complete information on General Education and SBCC requirements, see "General Education" and "Graduation and Transfer Requirements" in the Catalog Index.

The Natural History major is designed to provide a broad survey of the diversity of Earth's life forms and their evolutionary and environmental relationships. By carefully choosing electives, a student may emphasize specialized areas for transfer, including aquatic biology, zoology, botany, ecology and environmental biology.

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 (https://catalog.sbcc.edu/degrees-certificates-awards/#associatedegreestext) (Areas A-D) and Institutional Requirements (Area E) and Information Competency Requirement (Area F) OR
    b. OPTION 2: IGETC (https://catalog.sbcc.edu/transfer-curricula/#igetctext) Pattern OR
    c. OPTION 3: CSU GE Breadth (https://catalog.sbcc.edu/transfer-curricula/#csugebtext) 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 minimum of 12 units through SBCC.

Code	Title	Units
Department Requirements		
BIOL 112	Evolution and Adaptation	3
BIOL 120	Natural History	4
BIOL 122	Ecology	3
BIOL 123	Ecology Laboratory	1
BIOL 140	Principles of Biology	3
BOT 121	Plant Diversity [1]	4
ZOOL 122	Animal Diversity [2,3]	3
Complete 6 units selected from the following: [4]		6
BIOL 110	Natural Science	
BIOL 126	Aquatic Ecosystems	
BIOL 141	Biology Laboratory	
BIOL 144	Biogeography	
BIOL 150	Biodiversity	
BIOL 172	Symbiosis	
CHEM 110	Survey of Chemistry	
ZOOL 110	Animal Physiology	
ZOOL 124	Insect Biology	
ZOOL 137	Ornithology	
ZOOL 140	Animal Behavior	
Total Units		**27.00**

1. BIOL 101 (https://catalog.sbcc.edu/search/?P=BIOL%20101) Plant Biology may substitute for BOT 121 (https://catalog.sbcc.edu/search/?P=BOT%20121) Plant Diversity
2. ZOOL 123 (https://catalog.sbcc.edu/search/?P=ZOOL%20123) Animal Diversity Laboratory is recommended
3. BIOL 102 (https://catalog.sbcc.edu/search/?P=BIOL%20102) Animal Biology may substitute for ZOOL 122 (https://catalog.sbcc.edu/search/?P=ZOOL%20122) Animal Diversity + ZOOL 123 (https://catalog.sbcc.edu/search/?P=ZOOL%20123) Animal Diversity Laboratory
4. Other courses may be accepted to meet the 6 units of electives, including courses from disciplines outside of the sciences. Students are advised to select these units in consultation with the Natural History Faculty Advisor to ensure their course selection meets their individual educational and career goals and interests.

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. Compare, contrast and illustrate the life histories of a wide variety of life forms representing the diversity of life.
3. Examine the techniques for organizing biodiversity through nomenclature, taxonomy, systematics and biological and ecological hierarchies.
4. Evaluate the various fundamental ecological principles, from populations to communities and ecosystems, that determine the geographical distribution of life on Earth.
5. Describe fundamental metabolic pathways, explain bioenergetics, and relate the interdependence of these pathways within an organism and between an organism and its environment.
6. Collect data to test hypotheses using basic methods, instrumentation and quantitative analytical skills used to conduct biological research and analyze, graphically present, and interpret these data.
7. 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.

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 (https://www.sbcc.edu/counselingcenter/counselingappointments.php).