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

Requirements

Associate Degree Graduation Requirements

Complete all of the following:

1. All Major Requirements listed below with a "C" or better or "P" in each course (at least 20% of the major requirements must be completed through SBCC).
2. One of the following General Education options:
   a. OPTION 1: SBCC General Education (https://catalog.sbcc.edu/degrees-certificates-awards/#associatedegreestext) pattern OR
   b. OPTION 2: Cal-GETC (https://catalog.sbcc.edu/transfer-curricula/#igetctext) pattern
3. A minimum of 60 semester units of degree-applicable college credit (SBCC courses numbered 100 and higher and C1000 and higher).
4. Maintain a cumulative GPA of 2.0 or higher in degree-applicable coursework.
5. A minimum of 12 units through SBCC.

Code	Title	Units
Major Requirements		
Required Core		
BMS 107	Human Anatomy	4
BMS 108	Human Physiology	4
BMS 127	Medical Microbiology	4
or BMS 157	General Microbiology	
CHEM 101	Introductory Chemistry	4-5
or CHEM 104	Fundamentals Of General, Organic And Biological Chemistry	
or CHEM 155	General Chemistry I	
List A - Complete 13 units from the Bio-Medical Sciences Electives list [1]		13
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.

Code	Title	Units
Bio-Medical Sciences Electives:		
AH 120	Medical Terminology	1
ANTH 101	Physical Anthropology	3-4
or ANTH 101H	Physical Anthropology, Honors	
ANTH 103	Introduction To Cultural Anthropology	3-4
or ANTH 103H	Introduction To Cultural Anthropology, Honors	
ANTH 104	Language and Culture	3
ART 122	Advanced Drawing	3
ART 123	Figure and Portrait Drawing	3
BIOL 100	Concepts Of Biology	4
BIOL 101	Plant Biology	4
BIOL 102	Animal Biology	5
BIOL 103	Cell and Molecular Biology	5
BIOL 110	Natural Science	3
BIOL 112	Evolution and Adaptation	3
BIOL 116	Biological Illustration	4
BIOL 120	Natural History	4
BIOL 140	Principles of Biology	3
BIOL 141	Biology Laboratory	2
BIOL 291	Seminars in Biology	2
BMS 118	Human Microanatomy	3
BMS 119C	Human Dissection: Torso	1
BMS 128	Human Nutrition	3
BMS 128L	Human Nutrition Laboratory	1
BMS 136	Biology Of Human Sexuality	3
BMS 146	Human Form and Function	3
BOT 100	Concepts of Botany	4
BOT 121	Plant Diversity	4
BOT 123	Field Botany	3
CHEM 156	General Chemistry II	5
CHEM 211	Organic Chemistry I	3
CHEM 212	Organic Chemistry II	3
CHEM 221	Organic Chemistry Laboratory I	2.3
CHEM 222	Organic Chemistry Laboratory II	2.5
CIM 100	Cancer Registry Management I	3
CIM 125	Cancer Disease Management	4
CIM 225	Cancer Registry Management II	2
CIM 250	Cancer Statistics And Epidemiology	3
COMM 101	Introduction to Communication	3
COMM 121	Interpersonal Communication	3
or COMM 121H	Interpersonal Communication, Honors	
COMM 141	Small Group Communication	3
COMM 151	Intercultural Communication	3
COMM C1000	Introduction to Public Speaking	3
or COMM C1000H	Introduction to Public Speaking - Honors	
EMT 110	Emergency Medical Technician-Basic	6
HE 101	Personal Health Awareness	3
HE 102	Personal Health for Women	3
HE 103	Responding to Medical Emergencies	3
HE 104	Introduction to Athletic Injuries	3
HE 108	Advanced Assessment And Treatment Of Athletic Injuries	3
HIT 101	Introduction to Health Information Management	3
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	5
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 110	Introduction to Physiological Psychology	3
PSY 120	Introduction To Psychology	3
PSY 125	Psychology Of Human Sexuality	3
PSY 140	Child Development	3
PSY 145	Human Development	3
PSY 170	Abnormal Psychology	3
PSY 175	Social Psychology: Psychological Perspective	3
PSYC C1000	Introduction to Psychology	3-4
or PSYC C1000H	Introduction to Psychology - Honors	
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
STAT C1000	Introduction to Statistics	4
or PSY 150	Statistics for the Behavioral Sciences	
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 (https://www.sbcc.edu/counselingcenter/counselingappointments.php).