- Demonstrate a detailed mastery of human body structure and function, from micro- to macroscopic levels, including its homeostatic states and processes.
- Demonstrate a working knowledge of microbial systems, their role in Nature and their impact on humans.

Associate of Science Degree: Allied Health Track

Consult the Nursing Education faculty (City College) or a counselor to verify current course requirements for associate degree and baccalaureate nursing program preparation.

Courses Required for the Major:		Units
BIOL 107	General Biology – Lecture & Laboratory	4
BIOL 205	General Microbiology	5
BIOL 230	Human Anatomy	4
BIOL 235	Human Physiology	4
CHEM 100	Fundamentals of Chemistry	3
CHEM 100L	Fundamentals of Chemistry Laboratory	1
		Total Units = 21

Recommended Electives: Biology 101, 130, 180; Chemistry 130, 130L.

Associate of Science Degree: General Biology Track

Courses Required for the Major:		Units
BIOL 210A	Introduction to the Biological Sciences I	4
BIOL 210B	Introduction to the Biological Sciences II	4
CHEM 200	General Chemistry I	3
CHEM 200L	General Chemistry I Laboratory	2
CHEM 201	General Chemistry II	3
CHEM 201L	General Chemistry II Laboratory	2
MATH 121	Basic Techniques of Applied Calculus I	3
	and	
MATH 122	Basic Techniques of Calculus II	3
	or	
MATH 150	Calculus Analytical Geometry I	5
		Total Units = 23–24

Recommended electives: 101, 110, 130, 180, 205, 230, 232, 235, 290.

Transfer Information

Common university majors related to the field of Biology include: Agricultural Science, Biochemistry, Bioengineering, Bioinformatics, Biological Sciences, Biophysics, Botany and Plant Sciences, Cell Biology, Conservation, Developmental Biology, Ecology, Entomology, Exercise Science, Genetics, Kinesiology, Marine Biology, Medical Sciences, Microbiology, Molecular Biology, Natural Sciences, Neuroscience, Nursing, Nutrition and Food Science, Psychobiology, Toxicology, Zoology and Animal Science.

Course Requirements for Transfer Students
Students who plan to transfer to a four year college or university and earn a bachelor's degree in this discipline should consult with a counselor or visit the Transfer/Career Center to determine the appropriate major preparation courses for their specific transfer institution and major. Transfer students may also earn an Associate of Arts degree in Liberal Arts and Sciences. This degree may be individually tailored to each student's specific transfer requirements in order to provide the most efficient path to transfer. More information on transfer programs and procedures is available in the Transfer Programs section of the catalog.

Associate in Science in Biology for Transfer Degree:

Program Description

The Associate in Science in Biology for Transfer Degree is intended for students who plan to complete a bachelor's degree in Biology or a related major in the California State University (CSU) system. It is accepted by some but not all CSU campuses. Students who complete this degree and transfer to a participating CSU campus will be required to complete no more than 60 units after transfer to earn a bachelor's degree. It may not be appropriate preparation for students transferring to a CSU campus that does not accept the degree. Students who plan to complete this degree should consult a counselor for additional information about participating CSU campuses as well as university admission, degree and transfer requirements.

NOTE: Students intending to transfer into this major at a CSU should consult with a counselor and visit www.assist.org for guidance on appropriate transfer coursework.

Award Notes

General Education: In addition to the courses listed below, students must complete one of the following general education options:

- The IGETC pattern (page 126) is accepted by all CSU campuses and most UC campuses and majors. It is also accepted by some private/independent or out of state universities.
- The CSU GE pattern (page 134) is accepted by all CSU campuses and some private/independent or out of state universities. It is not accepted by the UC system.

It is strongly recommended that students consult with a counselor to determine which general education option is most appropriate for their individual educational goals.

The following is required for all AA-T or AS-T degrees:

- Completion of 60 CSU-transferable semester units. No more than 60 units are required.
- Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum of 2.0 is required for admission, some CSU campuses and majors may require a higher GPA. Please see a counselor for more information.
- Completion of a minimum of 18 semester units in an "AA-T" or "AS-T" major (see list below). All courses in the major must be completed with a grade of "C" or "P" or better.
- Certified completion of the California State University General Education-Breadth pattern (CSU GE; see page 134 for more information); OR the Intersegmental General Education Transfer Curriculum pattern (IGETC; see page 126 for more information).

Program Goals

The purpose of the Associate in Science in Biology for Transfer degree is to offer an organized course of study that will prepare students intending to major in Biology at the California State University (CSU). It is accepted by some but not all CSU campuses. Students who complete this degree and transfer to a participating CSU campus will be required to complete no more than 60 units after transfer to earn a bachelor's degree. It may not be appropriate preparation for students transferring to a CSU campus that does not accept the degree. Students who plan to complete this degree should consult a counselor for additional information about participating CSU campuses as well as university admission, degree and transfer requirements.

Program Emphasis

Careers related to this field typically require education beyond the associate degree level and some may require a graduate degree.

Courses Required for the Major:		Units
BIOL 210A	Introduction to the Biological Sciences I	4
BIOL 210B	Introduction to the Biological Sciences II	4
CHEM 200	General Chemistry I – Lecture	3
CHEM 200L	General Chemistry I – Laboratory	2
CHEM 201	General Chemistry II – Lecture	3
CHEM 201L	General Chemistry II – Laboratory	2
MATH 121	Basic Techniques of Applied Calculus I	3
	or	
MATH 150	Calculus with Analytic Geometry I	5
PHYS 125	General Physics	5
	and	
PHYS 126	General Physics II	5
	or	
PHYS 195	Mechanics	5
	and	
PHYS 196	Electricity and Magnetism	5
Select 3-5 Units from the following:		
CHEM 231	Organic Chemistry I – Lecture	3
	and	
CHEM 231L	Organic Chemistry I – Laboratory	2
MATH 122	Basic Techniques of Calculus II	3
MATH 151	Calculus with Analytic Geometry II	4
	Total Units = 34–38	

Black Studies

Award Type	Units
Associate of Arts Degree	
Black Studies	21*

* and courses to meet graduation requirements, general education and electives as needed to meet the minimum of 60 units required for the degree.

Description

The Black Studies program at City College provides an interdisciplinary and systemic approach to the historical and contemporary study of African people in Africa and in the Americas. The program is designed to provide enrichment in the social sciences and humanities by giving students in these areas the opportunity to link the tools of formal analysis to a specific cultural area in the