

# LIFE SCIENCE

## DEGREES, CERTIFICATES AND AWARDS

Associate in Science Degree (A.S.)

### DESCRIPTION

Life Science is defined as any one of the branches of science concerned with the structure and behavior of living organisms, such as biology, botany, zoology, physiology, or biochemistry. This curriculum is designed to provide the beginning basics of a two-year transfer program with emphasis on the uniformity and diversity of life. The course requirements fulfill the lower division requirements for such majors as biology, dentistry, liberal studies, medicine, nursing, pharmacy, environmental health, and microbiology. Please consult with a counselor for assistance on identifying the correct course sequencing for your field of study.

### PROGRAM LEARNING OUTCOMES

1. Students will demonstrate an understanding of fundamental biological concepts and knowledge of the structure and function of living organisms.
2. Students will display competency with respect to the use of standard laboratory equipment and techniques commonly used in life science labs.
3. Students will understand the process of scientific research and display critical thinking skills related to hypothesis development, experimentation and data interpretation.
4. Students will develop a foundation in biology strong enough to allow the successful completion of any attempted 200-level biology course(s).

### ASSOCIATE DEGREE PROGRAM

The Associate in Arts (AA) or the Associate in Science (AS) Degree involves satisfactory completion of a minimum of 60 semester units with a C average or higher, including grades of C in all courses required for the major, and fulfillment of all IVC district requirements for the associate's degree along with all general education requirements. The degree provides a sound basis for transfer to upper division institutions for additional degrees or for higher vocational preparation. To be eligible to receive an Associate Degree the student must complete the requirements for the major, the District requirements for an Associate Degree, and the General Education requirements. In addition students must maintain a minimum grade point average and meet the minimum grade requirements of their program. Detailed information is available in the college catalog.

### CAREER OPPORTUNITIES

Of the career opportunities identified many will usually require the completion of degree requirements at 4-year colleges and universities.

- |                                 |                       |                   |
|---------------------------------|-----------------------|-------------------|
| • Agronomist                    | • Epidemiologist      | • Mycologist      |
| • Anatomist                     | • Food Scientist      | • Nutritionist    |
| • Animal Scientist              | • Forester            | • Paleontologist  |
| • Biochemist                    | • Geneticist          | • Pathologist     |
| • Biomedical Engineer           | • Horticulturist      | • Pharmacologist  |
| • Biophysicist                  | • Immunologist        | • Physiologist    |
| • Botanist                      | • Marine Biologist    | • Science Teacher |
| • Developmental Biologist       | • Medical Illustrator | • Science Writer  |
| • Ecologist                     | • Microbiologist      | • Zoologist       |
| • Medical Laboratory Technician |                       |                   |

**Gainful Employment:** Federal regulations require institutions to provide students with Gainful Employment information for specific certificate programs offered at IVC. Please click on our Programs of Study link to view the information for each certificate program: <http://www.imperial.edu/courses-and-programs/programs-of-study/>



### TRANSFER PREPARATION

Courses that fulfill major requirements for an associate degree at Imperial Valley College may not be the same as those required for completing the major at a transfer institution offering a bachelor's degree. Students who plan to transfer to a four-year college or university should schedule an appointment with an IVC Counselor to develop a student education plan (SEP) before beginning their program.

#### Transfer Resources:

[www.ASSIST.org](http://www.ASSIST.org) – CSU and UC Articulation Agreements and Majors Search Engine

[www.CSUMentor.edu](http://www.CSUMentor.edu) – CSU System Information

[www.universityofcalifornia.edu/admissions/index.html](http://www.universityofcalifornia.edu/admissions/index.html) – UC System Information

[www.aiccu.edu](http://www.aiccu.edu) – California Independent Colleges and Universities, Association of

<http://wiche.edu/wue> – Western Undergraduate Exchange Programs

### 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 IVC offers a full array of financial aid programs – grants, work study, scholarships, and fee waivers (we do not participate in the federal loan programs). 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.imperial.edu/students/financial-aid-and-scholarships/](http://www.imperial.edu/students/financial-aid-and-scholarships/)

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## ASSOCIATE DEGREE PROGRAM

### LIFE SCIENCE MAJOR – A.S. DEGREE

Twenty-four (24.0) units required for the major.

ALL COURSES FOR THIS MAJOR MUST BE COMPLETED WITH A MINIMUM GRADE OF "C" OR BETTER.

**I. Select a minimum of 18.0 units from the following:**

ANTH	100	Physical Anthropology	3.0
BIOL	120	General Zoology I	4.0
BIOL	122	General Zoology II	4.0
BIOL	140	General Botany	3.0
BIOL	150	Human Genetics	3.0
BIOL	180	General Biology: Molecules, Cells and Genetics	4.0
BIOL	182	General Biology: Principles of Organismal Biology	4.0
BIOL	200	Human Anatomy & Physiology I	4.0
BIOL	202	Human Anatomy & Physiology II	4.0
BIOL	204	Human Anatomy	4.0
BIOL	206	Human Physiology	4.0
BIOL	220	General Microbiology	5.0

**II. Select a minimum of 6.0 units from the following:**

AG/ENVS	110	Environmental Science (3.0)	
CHEM	200	General Inorganic Chemistry I (5.0)	
CHEM	202	General Inorganic Chemistry II (5.0)	
CHEM	204	Organic Chemistry I (5.0)	
CHEM	206	Organic Chemistry II (5.0)	
GEOG	100	General Geology (4.0)	
GEOG	110	Earth and Space Science (3.0)	
GEOG	130	Climate and Weather (3.0)	
MATH	119	Elementary Statistics (4.0)	

**Total Major Units**

**24.0**