

# BIO-MEDICAL SCIENCES (BMS)

## Credit Courses

### BMS 100 The Human Body (4 Units)

Course Advisories: One semester High School Biology.

Hours: 108 (54 lecture, 54 lab)

Structure and function of the human body. Non-technical introduction to anatomy, physiology, exercise, fitness and nutrition. Laboratory experiments in human physiology; study of human anatomical materials. Satisfies SBCC General Education requirement in Natural Sciences, and Anatomy and Physiology requirements for SBCC LVN program. Does not satisfy requirements for ADN majors.

SBCC General Education: SBCCGE Area A

Transfer Information: CSUGE Area B2, CSUGE Area B3, IGETC Area 5B, IGETC Area 5C, CSU Transferable, UC Transferable

UC Transfer Limit: No credit for BMS 100 if taken after BMS 107 or 108; BMS 100, 107, 108, and 146 combined: maximum credit, two courses.

### BMS 107 Human Anatomy (4 Units)

Hours: 108 (54 lecture, 54 lab)

Structure of the human body. Laboratory includes study of a human anatomical specimen and comparative anatomy. Transferable to all four-year institutions, including nursing schools.

SBCC General Education: SBCCGE Area A

Transfer Information: CSUGE Area B2, CSUGE Area B3, IGETC Area 5B, IGETC Area 5C, CSU Transferable, UC Transferable

UC Transfer Limit: BMS 100, 107, 108 and 146 combined: maximum credit, two courses.

C-ID: BIOL 110B.

### BMS 107D Human Anatomy Discussion (1 Unit)

Corequisites: BMS 107.

Hours: 18 (18 lecture)

Concurrent Discussion and problem solving course designed for students currently enrolled in BMS 107.

Transfer Information: CSU Transferable, UC Transferable

### BMS 108 Human Physiology (4 Units)

Course Advisories: BMS 107, CHEM 101 or CHEM 104.

Hours: 108 (54 lecture, 54 lab)

Functions of the human body. Laboratory emphasizes recording physiological data from each student. Transferable to all four-year institutions, including nursing schools. Satisfies SBCC General Education requirement in Natural Sciences.

SBCC General Education: SBCCGE Area A

Transfer Information: CSUGE Area B2, CSUGE Area B3, IGETC Area 5B, IGETC Area 5C, CSU Transferable, UC Transferable

UC Transfer Limit: BMS 100, 107, 108, and 146 combined: maximum credit, two courses.

C-ID: BIOL 120B.

### BMS 108D Human Physiology Discussion (1 Unit)

Corequisites: BMS 108.

Hours: 18 (18 lecture)

Concurrent Discussion and problem-solving course designed for students currently enrolled in BMS 108.

Transfer Information: CSU Transferable, UC Transferable

### BMS 110 Physiology of Exercise (3 Units)

Course Advisories: BMS 107 and BMS 108.

Hours: 54 (54 lecture)

This course provides an in-depth analysis into the effects of acute and chronic physical activity on the structure and function of the human body. Specific emphasis on the chemistry, anatomy, physiology, and physical principles of exercise will be provided. The course will also include analyses of cellular respiration, biomechanics, the musculoskeletal system, body composition, ergogenic aids, athletic performance and other variables influencing exercise training, performance, and adaptations.

Transfer Information: CSU Transferable, UC Transferable

### BMS 110L Physiology of Exercise Laboratory (1 Unit)

Corequisites: BMS 110.

Hours: 54 (54 lab)

Prerequisite or Laboratory investigations of the effects of acute and chronic physical activity on the structure and function of the human body utilizing various fitness assessment methodologies.

Transfer Information: CSU Transferable, UC Transferable

### BMS 118 Human Microanatomy (3 Units)

Hours: 54 (54 lecture)

Functional histology of the human body. Cell structure and function; architecture, control and integration of cells in tissues of all major organs.

Transfer Information: CSUGE Area B2, IGETC Area 5B, CSU Transferable, UC Transferable

### BMS 119A Human Dissection: Head and Neck (1 Unit)

Prerequisites: BMS 107.

Hours: 54 (54 lab)

Directed dissection of the head and neck of a cadaver.

Transfer Information: CSU Transferable, UC Transferable

### BMS 119B Human Dissection: Appendages (1 Unit)

Prerequisites: BMS 119A.

Hours: 54 (54 lab)

Directed dissection of the appendages of a cadaver.

Transfer Information: CSU Transferable, UC Transferable

### BMS 119C Human Dissection: Torso (1 Unit)

Prerequisites: BMS 119B.

Hours: 54 (54 lab)

Directed dissection of the external and internal structures of the torso of a cadaver.

Transfer Information: CSU Transferable, UC Transferable

### BMS 127 Medical Microbiology (4 Units)

Prerequisites: CHEM 101 or one year of high school chemistry or CHEM 104 or CHEM 155.

Course Advisories: BMS 108, BIOL 100.

Hours: 108 (54 lecture, 54 lab)

Surveys the microorganisms that contribute to human health and human disease. Biology of bacteria, viruses, fungi and a variety of Eukaryotic organisms will be investigated; emphases includes the structural and metabolic diversity of microorganisms, and the molecular and cellular basis of host-microbe interactions.

Transfer Information: CSUGE Area B2, CSUGE Area B3, IGETC Area 5B, IGETC Area 5C, CSU Transferable, UC Transferable

### BMS 128 Human Nutrition (3 Units)

Hours: 54 (54 lecture)

Nutritional needs of the human body. Studies individual, local, national and world nutritional efforts.

Transfer Information: CSUGE Area E, CSU Transferable, UC Transferable  
C-ID: NUTR 110.

**BMS 128L Human Nutrition Laboratory (1 Unit)**

Corequisites: BMS 128.

Hours: 54 (54 lab)

Laboratory investigations of human nutrition; nutritional analysis of food; and guidelines for prevention of chronic diseases through diet.

Transfer Information: CSU Transferable, UC Transferable

**BMS 136 Biology Of Human Sexuality (3 Units)**

Hours: 54 (54 lecture)

Biological aspects of human sexuality. Fundamental principles and current research focused on the anatomy and physiology of reproductive systems, hormonal control of reproduction, diversity of sexual responses, sexual arousal, basic genetics and heredity, early human development, pregnancy, birth, causes and treatments of infertility, sexually transmitted infections, contraception, age-related changes in sexual function and behavior, sexual dysfunction and comparative sexual behaviors.

Transfer Information: CSUGE Area B2, CSUGE Area E, IGETC Area 5B, CSU Transferable, UC Transferable

**BMS 146 Human Form and Function (3 Units)**

Course Advisories: CHEM 101.

Hours: 54 (54 lecture)

Descriptive introduction to the structure and function of the human body.

SBCC General Education: SBCCGE Area A Lecture

Transfer Information: CSUGE Area B2, CSU Transferable, UC Transferable

UC Transfer Limit: BMS 100, 107, 108, and 146 combined: maximum credit, two courses.

**BMS 146L Human Form and Function Laboratory (1 Unit)**

Corequisites: BMS 146.

Hours: 54 (54 lab)

Prerequisite or Laboratory exercises covering the structure and function of the human body for non-clinical students entering the HIT/CIM programs. Along with BMS 146 it satisfies SBCC General Education requirement in Natural Sciences. Does not satisfy requirements for SBCC LVN or ADN majors.

SBCC General Education: SBCCGE Area A Lab

Transfer Information: CSUGE Area B3, CSU Transferable, UC Transferable

**BMS 157 General Microbiology (4 Units)**

Prerequisites: CHEM 101 or one year of high school chemistry with a minimum grade of C or CHEM 104 or CHEM 155.

Course Advisories: BIOL 100, BMS 108.

Hours: 108 (54 lecture, 54 lab)

Surveys the biology and ecology of various microbiological taxa: bacteria, archaea, viruses, fungi, protists, and microscopic animals. Emphasis placed on their symbiotic roles in nature, as well as on their evolution, taxonomy, metabolism, and genetics. Associated biotechnological techniques and industrial applications are explored.

SBCC General Education: SBCCGE Area A

Transfer Information: CSUGE Area B2, CSUGE Area B3, IGETC Area 5B, IGETC Area 5C, CSU Transferable, UC Transferable