

**College of San Mateo  
Official Course Outline**

1. **COURSE ID:** BIOL 130    **TITLE:** Human Biology  
**Units:** 3.0 units    **Hours/Semester:** 48.0-54.0 Lecture hours; and 96.0-108.0 Homework hours  
**Method of Grading:** Letter Grade Only  
**Recommended Preparation:**  
    Eligibility for ENGL 100, or Eligibility for ENGL 105
  
2. **COURSE DESIGNATION:**  
**Degree Credit**  
**Transfer credit:** CSU; UC  
**AA/AS Degree Requirements:**  
    CSM - GENERAL EDUCATION REQUIREMENTS: E5a. Natural Science  
**CSU GE:**  
    CSU GE Area B: SCIENTIFIC INQUIRY AND QUANTITATIVE REASONING: B2 - Life Science  
**IGETC:**  
    IGETC Area 5: PHYSICAL AND BIOLOGICAL SCIENCES: B: Biological Science
  
3. **COURSE DESCRIPTIONS:**  
**Catalog Description:**  
    Introductory study of human anatomy and physiology. Includes development, genetics, evolution and ecology. Recommended especially for students interested in Allied Health Fields.
  
4. **STUDENT LEARNING OUTCOME(S) (SLO'S):**  
    Upon successful completion of this course, a student will meet the following outcomes:
  1. Describe the physical structures of the body and describe their functions.
  2. Explain the processes of inheritance, reproduction, and development.
  3. Explain the general mechanism of homeostasis and provide examples. Discuss disorders of homeostasis.
  4. Discuss scientific principles as they pertain to the evolution of humans.
  5. Demonstrate knowledge of ecological principles related to human biology.
  
5. **SPECIFIC INSTRUCTIONAL OBJECTIVES:**  
    Upon successful completion of this course, a student will be able to:
  1. Describe the physical structures of the body and describe their functions.
  2. Explain the processes of inheritance, reproduction, and development.
  3. Explain the general mechanism of homeostasis and provide examples. Discuss disorders of homeostasis.
  4. Discuss scientific principles as they pertain to the evolution of humans.
  5. Demonstrate knowledge of ecological principles relating to human biology.
  
6. **COURSE CONTENT:**  
**Lecture Content:**  
    Suggested timeline for 17 week semester:
  1. Science as a method to evaluate questions; pseudoscience and critical thinking (1 week)
  2. Chemistry and cellular biology (2 weeks)
  3. Body organization and homeostasis (1 week)
  4. The skeletal system (1 week)
  5. The muscular system (1 week)
  6. The nervous system (2 weeks)
  7. The endocrine system (1 week)
  8. The cardiovascular system (1 week)
  9. The lymphatic and immune system (1 week)
  10. The respiratory system (1 week)
  11. The digestive system (1 week)
  12. The urinary system (1 week)
  13. The reproductive system (1 week)
  14. Genetics, inheritance, and development (1 week)
  15. Evolution and ecology (1 week)**Lab Content:**

NA

**TBA Hours Content:**

NA

**7. REPRESENTATIVE METHODS OF INSTRUCTION:**

Typical methods of instruction may include:

- A. Lecture
- B. Activity
- C. Discussion
- D. Observation and Demonstration
- E. Service Learning
- F. Other (Specify): Videos, class discussion, case studies, reading.

**8. REPRESENTATIVE ASSIGNMENTS**

Representative assignments in this course may include, but are not limited to the following:

**Writing Assignments:**

Journal keeping, research projects, reflections on assignments, discussions, service learning. Quizzes and activities with short answer and/or essay questions.

**Reading Assignments:**

Textbook reading, reading of news articles, reading for research paper, scholarly journal reading.

**Other Outside Assignments:**

Library research paper, worksheets, web-based activities. Service learning. Video assignments.

**To be Arranged Assignments:**

NA

**9. REPRESENTATIVE METHODS OF EVALUATION**

Representative methods of evaluation may include:

- A. Class Participation
- B. Class Performance
- C. Class Work
- D. Exams/Tests
- E. Final Performance
- F. Group Projects
- G. Homework
- H. Oral Presentation
- I. Papers
- J. Portfolios
- K. Projects
- L. Quizzes
- M. Research Projects
- N. Written examination
- O. Exams may include multiple choice, and/or true/false, and/or matching questions along with short answer and essay questions. Research projects may take form of paper, web presentation, oral report (or video presentation), or poster. Assignments are graded on accuracy, use of critical thinking skills, writing.

**10. REPRESENTATIVE TEXT(S):**

Possible textbooks include:

- A. Goodenough, J., McGuire, B.A.. *Biology of Humans: Concepts Applications, and Issues*, 6th ed. Benjamin Cummings Publishers, 2017
- B. Mader, S., Windelspecht, M.. *Human Biology*, 16th ed. McGraw-Hill Publishers, 2020
- C. Johnson, M.D. *Human Biology: Concepts and Current Issues*, 8th ed. Benjamin Cummings Publishers, 2017

**Origination Date:** November 2021

**Curriculum Committee Approval Date:** December 2021

**Effective Term:** Fall 2022

**Course Originator:** Theresa Martin