

**College of San Mateo**  
**Official Course Outline**

1. **COURSE ID:** BIOL 130    **TITLE:** Human Biology  
**Semester Units/Hours:** 3.0 units; a minimum of 48.0 lecture hours/semester  
**Method of Grading:** Letter Grade Only  
**Recommended Preparation:**  
    Eligibility for ENGL 838 or 848.  
    Completion or concurrent enrollment in any READ 400 level course
  
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)

## 7. REPRESENTATIVE METHODS OF INSTRUCTION:

Typical methods of instruction may include:

- A. Lecture
- B. Activity
- C. Discussion
- D. Service Learning
- E. 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:**

Structure labeling assignments, writing assignments (such as journal keeping or summarizing current news articles), research project (on current topics or issues in human biology), discussions, service learning.

### **Reading Assignments:**

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

### **Other Outside Assignments:**

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

## 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 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*, 5th ed. Benjamin Cummings Publishers, 2013
- B. Johnson, M.D. *Human Biology: Concepts and Current Issues*, 7th ed. Benjamin Cummings Publishers, 2013
- C. Mader, S., Windelspecht, M.. *Human Biology* , 13th ed. McGraw-Hill Publishers , 2013

**Origination Date:** August 2010

**Curriculum Committee Approval Date:** February 2014

**Effective Term:** Fall 2014

**Course Originator:** Theresa Martin