

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

1. **COURSE ID:** BIOL 250    **TITLE:** Human Anatomy    **C-ID:** BIOL 110B  
**Units:** 4.0 units    **Hours/Semester:** 48.0-54.0 Lecture hours; 48.0-54.0 Lab hours; 16.0-18.0 TBA hours; and 80.0-90.0 Homework hours  
**Method of Grading:** Letter Grade Only  
**Prerequisite:** BIOL 100, or BIOL 101 (offered at Skyline) or BIOL 110 or BIOL 130  
**Recommended Preparation:**  
Eligibility for ENGL 838 or ENGL 848 or ESL 400.
  
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  
CSU GE Area B: SCIENTIFIC INQUIRY AND QUANTITATIVE REASONING: B3 - Laboratory Activity  
**IGETC:**  
IGETC Area 5: PHYSICAL AND BIOLOGICAL SCIENCES: B: Biological Science  
IGETC Area 5: PHYSICAL AND BIOLOGICAL SCIENCES: C: Science Laboratory
  
3. **COURSE DESCRIPTIONS:**  
**Catalog Description:**  
Structural organization of the human body: Study of the gross and microscopic anatomy of the organ systems. Laboratory study using human cadaveric prosections. Extra supplies may be required. Requires TBA hours. Primarily intended for students of nursing, physiotherapy, physical education and related fields.
  
4. **STUDENT LEARNING OUTCOME(S) (SLO'S):**  
Upon successful completion of this course, a student will meet the following outcomes:
  1. Use anatomical language to effectively communicate about the structure and function of the human body.
  2. Identify anatomical structures from the cellular to the organismal level of organization, including identification using cadavers.
  3. Describe structural and functional relationships between anatomical structures.
  4. Evaluate anatomical information and data in order to differentiate between normal structures and those affected by clinical conditions.
  
5. **SPECIFIC INSTRUCTIONAL OBJECTIVES:**  
Upon successful completion of this course, a student will be able to:
  1. Use anatomical language to effectively communicate about the structure and function of the human body.
  2. Identify anatomical structures from the cellular to the organismal level of organization, including identification using cadavers.
  3. Describe structural and functional relationships between anatomical structures.
  4. Evaluate anatomical information and data in order to differentiate between normal structures and those affected by clinical conditions.
  
6. **COURSE CONTENT:**  
**Lecture Content:**  
The course content must include, but is not limited to the following:
  1. Cellular structures
  2. Histology
  3. Embryology
  4. Integumentary system
  5. Skeletal system
  6. Muscular system
  7. Surface (External) Anatomy

8. Nervous system including special senses (sensory organs)
9. Endocrine system
10. Cardiovascular system
11. Lymphatic system
12. Respiratory system
13. Urinary system
14. Digestive system
15. Reproductive system
16. Comparison of normal versus diseased, injured or age-related structural changes in any or all of the above organ systems.

**Lab Content:**

The Laboratory content/activities include, but is not limited to, the following:

1. Identification of microscopic structures and tissues.
2. Identification of bones and bone features.
3. Identification of skeletal musculature and muscle features.
4. Identification of internal organs.
5. Dissection of organs or observation of dissected organs.
6. Dissection of organisms or observation of dissected organisms.
7. Identification of structures on models.
8. Students will demonstrate laboratory procedures used to examine anatomical structures, including procedures using cadavers.

**TBA Hours Content:**

TBA hours to be conducted in the Anatomy and Physiology Lab or the Integrated Science Center (ISC). Under faculty supervision, the time is used to work with fellow students and biology faculty to develop and practice study skills that improve test taking success.

**7. REPRESENTATIVE METHODS OF INSTRUCTION:**

Typical methods of instruction may include:

- A. Lecture
- B. Lab
- C. Discussion
- D. Other (Specify): Emphasis is placed on the use of inquiry-based methods and active learning strategies including the use of anonymous polling methods to help guide discussions and expose misconceptions. Employment of activities and assessments designed to develop critical thinking skills. Lectures are accompanied by computerized demonstrations and presentation materials, transparencies, and other supplementary material including online assignments, assessments and resources. Structured as well as impromptu discussions. Laboratory demonstrations and exploration of models and specimens.

**8. REPRESENTATIVE ASSIGNMENTS**

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

**Writing Assignments:**

The students complete narratives focused on describing anatomical features or directions of clinical procedures (for evaluation).

The students complete written quizzes with short answers as well as more open-ended responses. Students also complete worksheets, compose maps (for evaluation).

Note: Many of these writing assignments develop and assess the student's critical thinking skills as they apply their knowledge and understanding of anatomical problem.

**Reading Assignments:**

Students are assigned to read passages from various textbooks, primary literature pieces (scientific journals) and case studies focused on problems of clinical anatomy (for evaluation).

Note: Many of these reading assignments are done in class and the student's reading skill towards understanding is developed and assessed using techniques based on the Reading Apprenticeship framework.

**Other Outside Assignments:**

Online quizzes, and adaptive learning modules, online questions following or embedded within online videos, creation of outlines and concept maps (for evaluation).

**To be Arranged Assignments:**

Students complete worksheets and labeling diagrams during TBA open labs, which are evaluated by instructors. Students verbally demonstrate their knowledge and understanding as instructors ask them questions about the lab material they are working with; students are evaluated based on effort and quality of their responses.

## 9. REPRESENTATIVE METHODS OF EVALUATION

Representative methods of evaluation may include:

- A. Class Participation
- B. Exams/Tests
- C. Group Projects
- D. Lab Activities
- E. Projects
- F. Quizzes
- G. Written examination
- H. 3-5 lecture exams consisting of multiple-choice questions, fill-in questions, matching, and short answer and essay questions. Laboratory Practicums with multiple stations and fill in the blank questions. Homework assignments to synthesize and summarize course content. Group or individual student presentations and demonstrations

## 10. REPRESENTATIVE TEXT(S):

Possible textbooks include:

- A. Martini, F. H. and Tallitsch, R. B.. *Human Anatomy*, 8th ed. Pearson, 2014
- B. McKinley, M., O'Loughlin, V. and Bidle, T. . *Anatomy & Physiology: An Integrative Approach*, 2nd ed. McGraw-Hill, 2015
- C. Marieb, E. N. and Hoehn, K.. *Human Anatomy and Physiology*, 10th ed. Pearson, 2015

Possible manuals include:

- A. Hebert, H., Krabbenhoft, M. & Chinn, J.. A Photographic Atlas for Anatomy and Physiology, Pearson, 10-24-2015
- B. Eder, D.. Laboratory Atlas of Anatomy and Physiology, McGraw-Hill, 06-19-2008

**Origination Date:** April 2015  
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**Course Originator:** Theresa Martin