

**EL CAMINO COLLEGE**  
**COURSE OUTLINE OF RECORD – Approved**

<b>Course Acronym:</b>	NESL
<b>Course Number:</b>	09A
<b>Descriptive Title:</b>	ESL for Anatomy and Physiology I
<b>Division:</b>	Humanities
<b>Department:</b>	English as a Second Language
<b>Course Disciplines:</b>	English as a Second Language
<b>Catalog Description:</b>	This first course in a two-course sequence prepares high-intermediate to advanced ESL students for credit anatomy and physiology courses. Several body systems and their functions as well as the basics of chemistry and cell biology are covered with reading, writing, speaking, and listening activities. Emphasis is on pronunciation, spelling, and study skills useful for success in healthcare programs. This course provides ESL support for students who plan to take or who concurrently take Anatomy 30, Anatomy 32, Anatomy and Physiology 34A, and Anatomy and Physiology 34B.
<b>Prerequisite:</b>	
<b>Co-requisite:</b>	
<b>Recommended Preparation:</b>	Noncredit English as a Second Language 08
<b>Course Length:</b>	Full Term
<b>Hours Lecture (per week):</b>	5
<b>Hours Laboratory (per week):</b>	0
<b>Outside Study Hours:</b>	10
<b>Total Course Hours:</b>	90
<b>Course Units:</b>	0
<b>Grading Method:</b>	P/NP/SP
<b>Credit Status:</b>	Non Credit
<b>Transfer CSU:</b>	No
<b>Effective Date:</b>	
<b>Transfer UC:</b>	No
<b>Effective Date:</b>	
<b>General Education:</b> ECC	
<b>Term:</b>	
<b>Other:</b>	
<b>CSU GE:</b>	
<b>Term:</b>	

<b>Other:</b>	
<b>IGETC:</b>	
<b>Term:</b>	
<b>Other:</b>	
<b>Student Learning Outcomes:</b>	<p><b>SLO #1</b> Upon completion of the course, students will be able to demonstrate an understanding of study skills necessary for success in an anatomy and physiology course.</p> <p><b>SLO #2</b> Upon completion of the course, students will demonstrate an understanding of the basic concepts of chemistry and cell biology.</p> <p><b>SLO #3</b> Upon completion of the course, students will be able to communicate in writing and speaking with reasonable accuracy concepts and vocabulary related to basic chemistry and cell biology as well as related to the integumentary, skeletal, muscular, and nervous systems of the body.</p> <p><b>SLO #4</b> Upon completion of the course, students will be able to demonstrate aural comprehension of vocabulary related to the basics of chemistry and cell biology as well as related to the integumentary, skeletal, muscular, and nervous systems of the body.</p>
<b>Course Objectives:</b>	<ol style="list-style-type: none"> <li>1. Demonstrate a knowledge of study skills related to success in college courses.</li> <li>2. Communicate in writing and speaking basic concepts of chemistry related to anatomy and physiology.</li> <li>3. Communicate in writing and speaking basic concepts of cell biology.</li> <li>4. Utilize vocabulary in writing and speaking related to the basics of chemistry and cell biology as well as related to the integumentary, skeletal, muscular, and nervous systems of the body.</li> <li>5. Pronounce with reasonable accuracy vocabulary related to the basics of cell biology and chemistry as well as related to the integumentary, skeletal, muscular, and nervous systems of the body.</li> <li>6. Demonstrate listening comprehension of concepts and vocabulary related to the basics of cell biology and chemistry as well as related to the integumentary, skeletal, muscular, and nervous systems.</li> <li>7. Spell with reasonable accuracy vocabulary related to the basics of chemistry and cell biology as well as related to the integumentary, skeletal, muscular, and nervous systems of the body.</li> </ol>
<b>Major Topics:</b>	<b>I. Study Skills (12 hours, lecture)</b>

- A. Time management
- B. Study environment
- C. Reading techniques
  - 1. SQR3
  - 2. PORPE
- D. Memorization techniques
- E. Test-taking strategies
- F. Note taking

## **II. Language Related to the Basics of Chemistry (15 hours, lecture)**

- A. Vocabulary
  - 1. Matter
  - 2. Mass
  - 3. Elements
  - 4. Subatomic particles
  - 5. Atomic number and weight
  - 6. Periodic table
  - 7. Bonding
- B. Pronunciation
- C. Listening and oral fluency
- D. Reading and writing
- E. Spelling

## **III. Language Related to the Basics of Cell Biology (15 hours, lecture)**

- A. Vocabulary
  - 1. Cytology
  - 2. Prokaryotic and eukaryotic cells
  - 3. Organelles
  - 4. Types of diffusion
  - 5. The cell cycle
- B. Pronunciation
- C. Listening and oral fluency
- D. Reading and writing
- E. Spelling

## **IV. The Integumentary System (12 hours, lecture)**

- A. Vocabulary
  - 1. Epidermis
  - 2. Dermis
  - 3. Hypodermis
  - 4. Accessory structures
    - i. Blood vessels
    - ii. Nerves
    - iii. Nails and hair
    - iv. Glands
- B. Language practice using content
  - 1. Listening and oral fluency
  - 2. Pronunciation
  - 3. Reading
  - 4. Writing
- C. Spelling

## **V. The Skeletal System (12 hours, lecture)**

- A. Vocabulary
  - 1. Bone tissue

2. Types of bone
3. Bone functions
4. Accessory structures
  - i. Cartilage
  - ii. Ligaments
  - iii. Tendons
  - iv. Joints
5. Major bones of the body
  - i. Skull
  - ii. Axial skeleton
  - iii. Appendicular skeleton

- B. Language practice using content
1. Listening and oral fluency
  2. Pronunciation
  3. Reading
  4. Writing

C. Spelling

## **VI. The Muscular System (12 hours, lecture)**

- A. Vocabulary
1. Bundles
    - i. Fascicles
    - ii. Fibers
    - iii. Myofibrils
    - iv. Myofilaments
  2. Acetylcholine
  3. Types of muscle
    - i. Voluntary
    - ii. Involuntary
    - iii. Smooth
    - iv. Cardiac
  4. Skeletal muscles of the body
  5. Location
    - i. Lateral
    - ii. Inferior
    - iii. Anterior
    - iv. Encircles

- B. Language practice using content
1. Listening and oral fluency
  2. Pronunciation
  3. Reading
  4. Writing

C. Spelling

## **VII. The Nervous System (12 hours, lecture)**

- A. Vocabulary
1. CNS
  2. PNS
  3. ANS
  4. Neurons
  5. Sensory receptors
- B. Language practice using content
1. Listening and oral fluency

	2. Pronunciation 3. Reading 4. Writing C. Spelling
<b>Total Lecture Hours:</b>	90
<b>Total Laboratory Hours:</b>	0
<b>Total Hours:</b>	90
<b>Primary Method of Evaluation:</b>	3) Skills demonstration
<b>Typical Assignment Using Primary Method of Evaluation:</b>	Complete the sentences below using the words in the word bank. Take turns reading the correct sentences aloud with a partner. Word Bank adipose callus cells connective elastin protein 1. The dermis is made of__tissue, and the hypodermis is made of__. 2. Connective tissue contains__and__fibers. 3. ____fibers allow the skin to stretch. 4. An area of the epidermis that is thickened is called a__.
<b>Critical Thinking Assignment 1:</b>	In this course we have learn a lot of vocabulary. What are some of the best strategies for remembering how to spell new vocabulary terms? State at least two strategies and the reasons why you think they are effective.
<b>Critical Thinking Assignment 2:</b>	In a short paragraph (4-6 sentences) explain what the SQR3 reading strategy is and then state whether you think it is a good strategy or not. Give at least two reasons to support your opinion.
<b>Other Evaluation Methods:</b>	Class Performance, Completion, Embedded Questions, Homework Problems, Matching Items, Multiple Choice, Objective Exam, Oral Exams, Other Exams, Presentation, Quizzes
<b>Instructional Methods:</b>	Demonstration, Discussion, Group Activities, Lecture, Multimedia presentations, Role play/simulation
<b>If other:</b>	Internet Presentation/Resources
<b>Work Outside of Class:</b>	Answer questions, Problem solving activity, Required reading, Study, Written work (such as essay/composition/report/analysis/research)
<b>If Other:</b>	
<b>Up-To-Date Representative Textbooks:</b>	Judy Meier Penn and Elizabeth Hanson. Anatomy and Physiology for English Language Learners. Pearson Longman, 2006.  Qualifier Text: Discipline Standard
<b>Alternative Textbooks:</b>	
<b>Required Supplementary Readings:</b>	
<b>Other Required Materials:</b>	Teacher-selected and teacher-generated materials

<b>Requisite:</b>	
<b>Category:</b>	
<b>Requisite course(s):</b> List both prerequisites and corequisites in this box.	
<b>Requisite and Matching skill(s):</b> Bold the requisite skill. List the corresponding course objective under each skill(s).	
<b>Requisite Skill:</b>	
<b>Requisite Skill and Matching Skill(s):</b> Bold the requisite skill(s). If applicable	<p><b>Demonstrate comprehension of vocabulary related to anatomy, diseases, symptoms, procedures, and common medical tests such as X-rays, and abbreviations.</b></p> <p>NESL 08 - Demonstrate comprehension of vocabulary related to anatomy, diseases, symptoms, procedures, and common medical tests such as X-rays, and abbreviations.</p> <p><b>Demonstrate comprehension of word parts commonly used in medical terminology.</b></p> <p>NESL 08 - Demonstrate comprehension of word parts commonly used in medical terminology.</p>
<b>Requisite course:</b>	Noncredit English as a Second Language-08
<b>Requisite and Matching skill(s):</b> Bold the requisite skill. List the corresponding course objective under each skill(s).	
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<b>Enrollment Limitations and Category:</b>	
<b>Enrollment Limitations Impact:</b>	
<b>Course Created by:</b>	Matthew Kline
<b>Date:</b>	11/22/2016
<b>Original Board Approval Date:</b>	06/19/2017

<b>Last Reviewed and/or Revised by:</b>	Matthew Kline
<b>Date:</b>	10/04/2021
<b>Last Board Approval Date:</b>	11/15/2021