

# DHYG 115-001-: ORAL HISTOLOGY AND EMBRYOLOGY 2 CREDITS

# **SYLLABUS**

### CATALOG DESCRIPTION

Introduction to general histology and embryology with emphasis on the microscopic structures of enamel, dentin, pulp, cementum, periodontal ligament, bone, oral mucosa, epithelial attachment and orofacial structures.

Prerequisites: Admissions into the Dental Hygiene Program.

Semester Offered: Fall

#### Common Student Learning Outcomes

Upon successful completion of San Juan College programs and degrees, the student will demonstrate competency in...

## BROAD AND SPECIALIZED LEARNING

Students will actively and independently acquire, apply, and adapt skills and knowledge with an awareness of global contexts.

## **CRITICAL THINKING**

Students will think analytically and creatively to explore ideas, make connections, draw conclusions and solve problems.

## **CULTURAL AND CIVIC ENGAGEMENT**

Students will act purposefully, reflectively, and ethically in diverse and complex environments.

#### **EFFECTIVE COMMUNICATION**

Students will exchange ideas and information with clarity in multiple contexts.

#### INFORMATION LITERACY

Students will be able to recognize when information is needed and have the ability to locate, evaluate, and use it effectively.

#### INTEGRATING TECHNOLOGIES

Students will demonstrate fluency in the application and use of technologies in multiple contexts.

Student work from this class may be randomly selected and used anonymously for assessment of course, program, and/or institutional learning outcomes. For more information, please refer to the Dean of the appropriate School.

# **Course Learning Outcomes**

Upon successful completion of the course, the student will be able to...

A copy of this approved syllabus in on file in the dean's office.

## **COURSE GOALS:**

- 1. To be able to differentiate between the body's cells, tissues and organs with emphasis on the oral and facial area by development structure and function.
- 2. To be able to identify the morphological and physiological characteristics of oral tissues.
- 3. To be able to assess oral and facial developmental disturbances in reference to the development of the human embryo.
- 4. To be able to correctly estimate the developmental patterns, eruption, and exfoliation of teeth.
- 5. To be able to differentiate tooth tissues by origin, formation, composition, components, characteristics, and function and assess clinical considerations of tooth tissues and supporting structures.
- 6. To learn the course material well enough to pass exams and Boards with confidence LEARNING OUTCOMES:

Upon completion of this course the student will be able to:

- 1. State the development, structure and functions of the body's cells, tissues and organs.
- 2. Describe the development of the human embryo according to time and sequence.
- 3. Describe the process of oral and facial development from the time of fertilization to the fetal stage of a human infant including developmental disturbances that can arise during the process.
- 4. Describe the morphological and physiologic characteristics of the following tissues located in and around the oral cavity:
  - a. Epithelial Tissue
  - b. Connective Tissue
    - Connective Tissue Proper
    - Cartilage
    - Bone
    - Blood
    - Lymph
  - c. Muscle Tissue
  - d. Nerve Tissue
- 5. Describe the process of tooth development, eruption and exfoliation.
- 6. Describe the origin, formation, composition, components, characteristics, functions, and clinical considerations of the following tooth tissues and tissues supporting the teeth:
  - a. Enamel
  - b. Dentin
  - c. Pulp
  - d. Cementum
  - e. Periodontal Ligament
  - f. Alveolar Bone
  - g. Oral Mucosa
  - h. Salivary Glands and Tonsils
- 7. Explain clinical considerations relating to the tissues in the orofacial region.