

## SYLLABUS

COURSE #: DHYG 115

COURSE TITLE: Oral Histology and Embryology

# of CREDITS: 2 (2 + 0 + 0)

### CATALOG DESCRIPTION:

Introduction and description of 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: All of the following courses must have been completed with a "C" or above: BIOL 121, BIOL 252, BIOL 258, BIOL 224, ENGL 111, MATH 113 or above, and admission into the Dental Hygiene Program. Co-requisite Courses: DHYG 111, 113, 114, and 217.

### 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 prepare the student to function as a viable member of the dental health team.
7. To have fun learning an interesting field
8. To learn the course material well enough to pass exams and Boards with confidence
9. To be prepared to meet patients, treat them as real people and help them receive the care they need and deserve.

### 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. Temporomandibular Joint
    - h. Oral Mucosa
    - i. Salivary Glands and Tonsils
  7. Explain clinical considerations relating to the tissues in the orofacial region.

**COMMON STUDENT LEARNING OUTCOMES:**

Upon successful completion of San Juan College programs and degrees the student will:

**Learn:**

Students will actively and independently acquire, apply and adapt skills and knowledge to develop expertise and a broader understanding of the world as lifelong learners.

**Think:**

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

**Communicate:**

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

**Integrate:**

Students will demonstrate proficiency in the use of technologies in the broadest sense related to their field of study.

**Act:**

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

This syllabus developed by: Julius N. Manz DDS August 2004

San Juan College

COURSE GUIDE

DHYG 115 Oral Histology and Embryology (2 + 0 + 0) 2 credit hours

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Required Textbooks, Illustrated Dental Embryology, Histology, and Anatomy, (1997).  
1<sup>st</sup> Ed., Bath-Balogh, M. and Fehrbach, M. Philadelphia: W. B. Saunders Co.

Illustrated Dental Embryology, Histology, and Anatomy Workbook, (1997). Bath-Balogh, M. and Fehrbach, M. Philadelphia: W. B. Saunders Co.

Supplementary Textbooks and Materials: Permar's Oral Embryology and Microscopic Anatomy, (2000). 10<sup>th</sup> Ed, Melfi, R. and Alley, K. Philadelphia: Lippincott, Williams & Wilkins.

Head & Neck Histology & Anatomy: A Self-Instructional Program, (2000). Smith, S. and Karst, N. Stamford, CT: Appleton & Lange

Color Atlas of the Head and Neck, (1998). McMinn, R. St. Louis: Mosby-Year Book

Further reference materials available in the Dental Hygiene Program Office and in the Library

Grading Criteria:\*

Quizzes 30%

Midterm Exam 30%

Comprehensive Final Exam 40%

A= 90- 100%

B= 80- 89%

C= 75- 79%

D= 65- 74%\*\*

F= below 65%\*\*

*\*A dental hygienist must exhibit professionalism through the application of a professional code of ethics. Unprofessional conduct will be reflected in the grade and may be grounds for dismissal. Refer to Clinic Manual for further information.*

*\*\* A final grade below a "C" (75%) constitutes dismissal from the Dental Hygiene Program. It is the responsibility of any student having difficulty with this course to contact the professor immediately and arrange for tutoring and/or other assistance.*

Instructor's Policies:

Preparation: During this course it is expected that the student prepare for class. This includes reading or viewing the information prior to class. Students should be prepared to participate in active learning discussions in each class on the topic assigned for that day. If the student has adequately prepared for the class there should be little trouble passing these tests or completing course assignments.

Attendance Policy: Students are expected to attend all regularly scheduled classes for which they are registered. Valid reasons for missing classes do not relieve the student from making up any missed work. Any instruction missed and any work not subsequently completed will necessarily affect the grade of the student, regardless of the reason for the absence. Students are expected to be in the classroom, laboratory or clinic and be ready to begin the session on time.

Make-Up Policy: A student will not be allowed to make up quizzes (a zero will be given for each missed quiz). If a major examination is missed, it is the student's responsibility to make arrangements with the instructor and schedule a Make-Up Examination. The Make-Up Exam will be different from the one given to the other students and may be oral, written, or a combination of both.

Assignments: Assignments that are not received on time will receive a 10% reduction in grade for every week the assignment is overdue.

Professional Policy: All students are expected to participate in an active and productive manner which enhances learning for all in the classroom and clinical settings. Students are considered mature enough to seek faculty assistance and to monitor their own progress in meeting course requirements. Professional language and demeanor are expected at all times.

Academic Dishonesty: Unethical and unprofessional activities will not be tolerated. Refer to the Dental Hygiene Student Handbook and the SJC Catalogue for more information.

Student Grievance Procedure: Policies regarding Student Grievance can be found on page 49 of the SJC Course Catalog 2004-2005. A student who has a problem with the course or the course instructor should make every attempt to resolve the problem with the course instructor first. If the issue remains unresolved, the student should then discuss their concerns with the Dental Program Director. If the response is not adequate to the student, the student should then follow the outlined SJC policy for Student Grievance.

Course Outcomes Inventory: The effectiveness of DHYG 115 is measured by several methods:

1. Completion of all course work with a satisfactory grade.
2. Course evaluations.
3. Analysis of clinical application of material presented.
4. Scores on National and Regional Boards are reviewed and evaluated.

Accommodations Statement: Students who need accommodations (i.e. notetaker, interpreter, special seating, etc.) need to provide accommodation notices to the instructor. Students can contact the Students with Disabilities on Campus (SDOC) Coordinator in the Counseling Center, located in the Clocktower Building, to make arrangements and provide documentation in accordance with the Americans with Disabilities Act of 1990.