

**STATE UNIVERSITY OF NEW YORK
COLLEGE OF TECHNOLOGY
CANTON, NEW YORK**



COURSE OUTLINE

DHYG 161 Histology

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**SCHOOL OF SCIENCE, HEALTH & CRIMINAL JUSTICE
DENTAL HYGIENE AAS PROGRAM
MARCH 2015**

DHYG 161 HISTOLOGY

- A. **TITLE:** HISTOLOGY & EMBRYOLOGY
- B. **COURSE NUMBER:** DHYG 161
- C. **CREDIT HOURS:** 1
- D. **WRITING INTENSIVE COURSE:** NO
- E. **COURSE LENGTH:** 10 weeks
- F. **SEMESTER(S) OFFERED:** Fall
- G. **HOURS OF LECTURE, LABORATORY, RECITATION, TUTORIAL, ACTIVITY:**
One hour of lecture each week.
- H. **CATALOG DESCRIPTION:** This course provides the foundation for assessing a patient's oral health status in the clinical setting. During the assessment phase of care, the hygiene student must be capable of distinguishing normal, a variant of normal or a developmental abnormality from a pathology. This course contains basic, general histologic information with a focus on oral tissue components and oral facial development.
- I. **PRE-REQUISITES/CO-COURSES:** Students must be matriculated in Dental Hygiene prior to registering for this course.
- J. **GOALS (STUDENT LEARNING OUTCOMES):** Upon completion of this course, the student will meet the following course learning outcomes which are linked to the institutional learning outcomes. This course provides foundational knowledge for performing program competencies 1.2, 1.3 and 1.4.

Course Learning Outcomes	Institutional Objectives
1. Describe the origin, development, organization and structure of the various cells and tissues of the human body.	3. Prof Competency
2. Describe the normal histological structure and functions of the teeth, the periodontium, oral mucosa, and the salivary glands.	3. Prof Competency
3. Describe the embryonic development of the face, oral cavity, teeth, and related structures.	3. Prof Competency
4. Differentiate between normal, a variant of normal or a developmental abnormality from a pathology.	2. Critical Thinking 3. Prof Competency

*Specific learning objectives will be provided with each unit.

- K. **TEXTS:** Bath-Balogy, M., & Fehrenbach, M.J., Dental Embryology, Histology & Anatomy, 3rd Edition. 2010. St. Louis, MO: Elsevier Saunders
- L. **REFERENCES:**
Woelfel, J.B. and Scheid, R.C., Dental Anatomy – Its Relevance to Dentistry, 8th Ed., Lippincott Williams & Williams, 2012.
- M. **EQUIPMENT:** none
- N. **GRADING METHOD:** A – F
A letter grade will be issued utilizing the conversion table below. Students must achieve a minimum C grade in all dental hygiene courses to maintain matriculation in the program.

A	94 - 100
B+	90 - 93
B	84 - 89
C+	80 - 83
C	75 - 79
D	74 - 70
F	69 or lower

O. MEASUREMENT CRITERIA/METHODS:

Homework Assignments
 Quizzes (3)
 Final Exam

P. DETAILED COURSE OUTLINE:

I. Overview of the Cell

- A. The Cell
- B. Cell Division
- C. Extracellular Materials
- D. Cellular Junctions

II. Basic Tissues

- A. Epithelial Tissue
- B. Basement Membrane
- C. Connective Tissue
- D. Muscle Tissue
- E. Nerve Tissue

III. Oral Mucosa

- A. Regional Differences in Oral Mucosa
- B. Pigmentation of the Oral Mucosa
- C. Renewal, Repair and Aging of Oral Mucosa

IV. Gingival and Dentogingival Junctional Tissues

V. Prenatal Development

- A. Development of the Face and Neck
- B. Development of Oral Facial Structures
- C. Development of Glands

VI. Tooth Development & Eruption

- A. Apposition of Enamel Matrix
- B. Maturation of Enamel Matrix
- C. Components of Mature Enamel

VII. Dental Tissues

- A. Enamel
- B. Dentin
- C. Cementum
- D. Pulp

VIII. Periodontium

- A. Cementum
- B. Alveolar Bone

C. Periodontal Ligament

IX. Head and Neck Structure

A. Lymphatics

B. Nasal Cavity & Paranasal Sinuses

C. Tonsils

D. Thyroid Gland

Q. LABORATORY OUTLINE: Not applicable