**Course Title:** Histology and Oral Anatomy for the Dental Hygienist  
**Department:** Allied Health  
**Curriculum:** Dental Hygiene

| Course Code: | DHY*228  
| Course Type: | L/M/D  
| Elective Type: | G  

**Course Descriptors:** Make certain that the course descriptors are consistent with college and Board of Trustees policies, and the current course numbering system.

**Prerequisites:** Matriculation in the Dental Hygiene Program

**Corequisites:**  
- DHY*209 Fundamentals of Dental Hygiene Theory  
- DHY*210 Fundamentals of Dental Hygiene Clinic  
- DHY*212 Diagnostic Radiography for the Dental Hygienist

**Contact Hours:**  
- Lecture: 3  
- Clinical: 0  
- Lab: 0  
- Studio: 0  
- Seminar: 2  
- TOTAL: 5

**Other Requirements:**  
Ratio for Seminar 15 to 1

**Ability-Based Education (ABE) Statement:** At Tunxis Community College students are assessed on the knowledge and skills they have learned. The faculty identified the General Education Abilities critical to students’ success in their professional and personal lives. In every class, students are assessed on course abilities, sometimes program abilities, and, in most classes, at least one General Education Ability. Students will receive an evaluation of the degree to which they have demonstrated or not demonstrated that General Education Ability.

**Catalog Course Description:** Provides a comprehensive study of microscopic morphology of the head, neck and oral tissues, anatomy of the head and neck, including embryology and structures and functions of the human dentition. This study is specific and relevant to the practice of dental hygiene for utilization in skill development, radiographic interpretation, and client education.

**Topical Outline:** List course content in outline format.  
1. Oral structures  
2. A. Osteology  
3. B. Temporomandibular joint  
4. Periodontium  
5. Myology  
6. Lymphatic and salivary glands  
7. Arteries and veins
| 7. Nerves                                      |
| 8. Dental Anomalies and occlusion            |
| 9. Morphology of the permanent dentition and tooth numbering systems and terminology |
| 10. Mixed dentition, primary dentition, histology of eruption and exfoliation  |
| 11. Cell and basic tissues                   |
| 12. Prenatal development, face, neck         |
| 13. Oralfacial development, gingiva, and DGJ |
| 14. Enamel, dentin, and pulp                 |

Upon successful completion of this course, the student will be able to do the following:

1. identify the embryonic processes of the head, neck and jaws including the temporomandibular joint
2. list the factors involved in the growth and turnover of alveolar bone
3. describe the developmental process for cells of dental origin
4. identify the histological components of the periodontal attachment mechanism
5. identify microscopic cell development of the salivary glands
6. locate and identify the major salivary glands, ducts and orifices of the oral cavity including microscopic cell development
7. locate and identify lymphatics & blood supply to and from the head and neck
8. identify the cranial nerves and trace the pathway of the trigeminal nerves and its branches in preparation for delivery of local anesthesia
9. describe the origin, insertion, blood supply, innervation and function of the muscles of mastication, pharynx, facial expression, and hyoid region
10. develop a working knowledge of the structure and function of all the bones of the skull including landmarks and innervation sights
11. describe the function and structure of the hard and soft tissues of the periodontium
12. define and identify the oral structures including enamel, dentin, cementum, and pulp tissues
13. identify all permanent and primary teeth including pits, cusps, fossa, grooves, ridges, root morphology and associated tooth structures
14. demonstrate ability to chart permanent, mixed and primary dentition using different charting techniques and numbering systems
15. describe and classify various occlusions

*Students must achieve at least 75% (C) for successful completion of the course.*

**PROGRAM:** *(Numbering reflects Program Outcomes as they appear in the college catalog)*

**GENERAL EDUCATION:** *(Numbering reflects General Education Outcomes as they appear in the college catalog)*

8. **Scientific Knowledge** - Students will gain a broad base of scientific knowledge and methodologies in the natural sciences. This will enable them to develop scientific literacy, the knowledge and understanding of scientific concepts and processes essential for personal decision making and understanding scientific issues.

- **Demonstrates:** Consistently recalls and correctly applies discipline-specific terms, relevant theories, laws, and concepts to analyze and explain scientific information.
- **Does Not Demonstrate:** Inconsistently recalls or incorrectly applies discipline-specific terms, relevant theories, laws, and concepts to analyze or explain scientific information.

**Evaluation:**

List how the above outcomes will be assessed.

- written exams
- seminar exercises
- quizzes
### Instructional Resources:
List library (e.g. books, journals, on-line resources), technological (e.g. Smartboard, software), and other resources (e.g. equipment, supplies, facilities) required and desired to teach this course.

### Required:
- Osteology skulls, Dental Study Model

### Desired:

### Textbook(s)
- *Dental Embryology, Histology and Anatomy* by Mary Bath-Balogh and Margaret J. Fehrenbach - latest edition
- *Dental Embryology, Histology and Anatomy* Lab Manual by Mary Bath-Balogh and Margaret J. Fehrenbach - latest edition
- *Illustrated Anatomy of the Head and Neck* by Fehrenbach and Herring - latest edition
- *Head and Neck by Numbers* by Felicia Siggard - latest edition