### COURSE SYLLABUS

<table>
<thead>
<tr>
<th>Course Title:</th>
<th>Histology and Oral Anatomy for the Dental Hygienist</th>
<th>Date submitted:</th>
<th>March 2017 (AAC: 17-28)</th>
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<tbody>
<tr>
<td>Department:</td>
<td>Allied Health</td>
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<tr>
<td>Curriculum:</td>
<td>Dental Hygiene</td>
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**Course Code:** DHY*228  
A: Clinical  B: Lab  D: Distance Learning  
I: Individual/Independent  L: Lecture  M: Seminar  
Internship  P: Practicum  U: Studio  
X: Combined Lecture/Lab  Y: Combined Lecture/ 
Clinical/Lab  Z: Combined Lecture/Studio

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

**Course Type:** D/L/M  
**Elective Type:** G

**Prerequisites:**  
Admission to dental hygiene program and C or better in Anatomy & Physiology I (BIO*211)

**Credit Hours:** 3  
**Developmental:** No  
**Contact Hours:**  
- Lecture: 3  
- Clinical: 0  
- Lab: 0  
- Studio: 0  
- Seminar: 2  
**TOTAL:** 5

**Corequisites:**  None

**Class Maximum:** 30  
**Semesters Offered:** F

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

**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:**  
- Oral structures, basic tooth morphology and numbering systems  
- Periodontium  
- Osteology and temporomandibular joint  
- Lymphatic and salivary glands  
- Muscles  
- Arteries and veins  
- Nerves  
- Morphology of the permanent dentition  
- Morphology of the primary dentition, eruption and exfoliation  
- Dental anomalies and occlusion  
- Development of the face and jaw  
- PDL and alveolar bone growth and turnover  
- Development of teeth, enamel, dentin, pulp, cementum
### Outcomes:
Describe measurable skills or knowledge that students should be able to demonstrate as evidence that they have mastered the course content.

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 identity 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.

Assessment will be based on the following criteria:

1. written exams
2. project evaluations
3. 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:**
- Interactive TV Anatomy web based
- Kilgore Dental Study Model

**Desired:**
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<th><strong>Textbook(s)</strong></th>
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<tr>
<td><em>Dental Embryology, Histology and Anatomy</em> by Mary Bath-Balogh and Margaret J. Fehrenbach-latest edition</td>
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<tr>
<td><em>Dental Embryology, Histology and Anatomy Lab Manual</em> by Mary Bath-Balogh and Margaret J. Fehrenbach- latest edition</td>
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