

**Amarillo College Division of Allied Health
School of Dental Hygiene**

**DHYG 1301
Orofacial Anatomy, Histology, & Embryology
Course Syllabus
Fall 2005**

Course Description

The study of histology and embryology of oral tissues, gross anatomy of the head and neck, tooth morphology, and individual tooth identification. (3 semester hours; 2 lecture; 4 lab)

Learning Outcomes

Identify the histological and embryological development of the orofacial structures; label the major structures of the head and neck; and compare and contrast various teeth including the crown and root morphology.

Course Meeting Days and Times

Lecture: Wednesdays 9:00 -11:00 a.m. Allied Health Bldg. Room 172

Laboratory: Wednesdays 1:00 - 5:00 p.m. Allied Health Bldg. Room 106

Course Director

Name: Jnita Collins, B.S., R.D.H.
Office Location: Allied Health Bldg. 122
Office Phone: (806)356-3644
Campus E-Mail Address: collins-jj@actx.edu
Web Address: http://www.actx.edu/~collins_jj/
Office Hours: Monday 9:00-12:00 & 1:30-4:30
Friday 9:00-11:30

Course Adjunct Faculty

Name: Karen Lester, A.A.S., R.D.H.

Guest Lecturer

Name: Tyler Pendergrass, D.D.S.

Required Course Textbooks

1. Anatomy of Orofacial Structures, Brand and Isselhard, Mosby Publishing Co., 6th Edition.
2. Essentials of Oral Histology and Embryology, A Clinical Approach, James K. Avery, Mosby Publishing Co., 2nd Edition.

Recommended Course Resource

1. Any dental hygiene national board review book or card set. Examples are Mosby's or Saunders comprehensive review books and dental hygiene review card decks.

Course Overview

DHYG1301 is a class in which the dental hygiene student learns the anatomy of the structures of the head and neck region. This course will include a study of the embryological formations and the histological foundations of each of the structures. Also included is an extensive study of the structure and anatomy of each tooth in the human dentition. Unit Objectives will be distributed at the beginning of each unit of study. Unit objectives will coordinate with the materials presented in lecture, handouts, reading assignments, quizzes, and examinations.

Course SCANS Competencies

Reading: The student will complete all reading assignments, and be able to understand and interpret the information necessary to the study of anatomy, histology, and embryology.

Writing: The student will submit answers to questions given by the instructor on quizzes, major examinations and assignments.

Speaking: The student will participate verbally in class discussions, and will answer oral questions to the best of his/her ability. The student will also learn to direct conversation in a professional manner when interacting with patients and other dental professionals.

Listening: The student will listen attentively to lecture and audio/visual presentations in order to take good notes and to assimilate enough information to ask questions when necessary. The student will listen attentively to any guest speakers in the classroom and in professional dental meetings in order to ask salient questions at the conclusion of the speaker's presentation.

Critical thinking: The student will utilize the information presented in this class, as well as in other courses in this program, and assimilate this information in order to correctly answer the various types of questions presented in quizzes and examinations. The questions contained in the quizzes and examinations require the student to be able to reason, problem solve, make logical decisions based on information supplied, and/or to describe further steps or actions necessary to derive reasonable conclusions.

Personal Qualities: The student is expected to complete all assignments, quizzes, and examinations independently unless assigned to work in a group. The student is expected to work independently or in group situations with a professional attitude and in cooperation with the instructor and other classmates. The student is encouraged to have the honesty and integrity to perform assignments as expected.

Workplace Competencies: The student will, during class and discussions, be able to identify orofacial structures and explain the characteristics of their appearance. The student will be able demonstrate knowledge of the orofacial structures in the various

examinations of the patient and in recording the findings in the patient's file.

Computer Usage: The student will utilize the computer to find information that is applicable to the study of anatomy, histology, and embryology.

Students with Disabilities

"Any student who, because of a disabling condition, may require some special arrangements in order to meet course requirements should contact disAbility Services (Student Service Center Room 119, Phone 371 -5436) as soon as possible."

Attendance Policy

"Regular attendance is necessary for satisfactory achievement. Therefore, it is the responsibility of the student to attend class." (Amarillo College Student's Rights and Responsibilities)

Due to the tremendous amount of information contained in this course, the student who plans to succeed should also plan to attend all course lecture and laboratory sessions regularly and promptly. Without question, the instructor expects each student to be present at each session. Unfortunately, no one has ever developed a short cut which will replace hours of actual experience needed to master a new skill; therefore, you must be present to acquire the specific knowledge in this subject. You may have no more than 1 absence in this course without affecting your final grade. Beginning with the 2nd absence, 1 point will be deducted from your final grade for **each** absence thereafter. A student will receive 2 bonus points to the final course grade for **perfect** attendance in both lecture and laboratory sessions.

It is the expectation of the instructor, for students to come to class prepared to participate in discussion and activities. In order to gain an understanding of how theory translates into the clinical experience, students will need a baseline knowledge, obtained through reading assignments in this course as well as familiarity with content of courses taken up to this point.

Grading Criteria

The final course grade will be computed as follows:

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|---------------------------------|-----|
| Major Examinations | 40% |
| Quizzes | 10% |
| Final Practical Examination | 25% |
| Comprehensive Final Examination | 25% |

The following grade scale applies throughout this course:

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| A = 93 - 100% |
| B = 83 - 92% |
| C = 75 - 82% |
| F = Below 75% |

Note: A grade of "D" is not possible in this course.

Required Examinations

The following criteria will be used to determine the student's grade:

The course will consist of four major examinations, several quizzes, one out-of-class

assignment involving research and the use of the internet, a final tooth identification practical examination, and a comprehensive final examination. Changes in the schedule of major examinations will be announced approximately one week in advance. Quizzes may, or may not, be announced in advance. Refer to the course calendar for the schedule of materials to be covered in each class or lab period and the tentative examination dates. Also, please note the provisions of the Make-up Policy in this syllabus for missed examinations. Major examinations and quizzes will be objective in nature (true/false and multiple choice) with a few questions being subjective in nature (short answer, essay, and fill in the blank). The final examination will be entirely objective in nature and will test information for the entire course. The final laboratory practical will require the student to identify extracted teeth by their anatomical features.

Make-up Policy

A student **will not** be allowed to make-up quizzes, as a **zero** will be given for each missed quiz. One quiz grade may be dropped at the end of the semester. If a student is absent on the day when a major examination is given, the student may make-up the missed work as follows:

1. It is the responsibility of the student to make arrangements with the instructor within 24 hours of returning from the absence to reschedule the examination.
2. The missed work must be made up within TWO Amarillo College school days where the day ends at 4:00 p.m.
3. The make up work may earn a maximum of 80% of the original point value.

Course Ethics

Amarillo College also has standards that must be upheld. At Amarillo College, there are grave academic penalties for unethical conduct. The policy and penalty for such conduct is provided in the General Catalog as follows:

"A high standard of conduct is expected of all students. It is assumed that obedience to the law, respect for properly constituted authority, personal honor, integrity and common sense will guide the actions of each member of the college community both in and out of the classroom. The student code of conduct is published in the *Student Rights and Responsibilities* publication. Any student who fails to perform according to expected standards may be disciplined."

It can be concluded from this statement that cheating and other forms of unethical course conduct are absolutely forbidden by Amarillo College policy. To be more specific, in this course, **ANY** unethical conduct is a cause for a final grade of "**F**" regardless of other grades earned to-date in the course.

In summary, a student should not risk his or her final grade in this course and any future enrollment privileges at Amarillo College as the result of the unethical conduct. **This policy will be strictly enforced.**

All students are considered mature enough to seek faculty assistance and to monitor their own progress in meeting course requirements. The following professionalism standards apply to this course:

1. Student is prompt to class.
2. Student is prepared for class sessions.

3. Student assumes responsibility for his/her own learning.
4. Student is concerned with excellence in learning rather than just meeting minimal criteria.
5. Student applies lecture material in the clinical setting.
6. Student maintains his/her composure, dealing with conflict in a constructive way.
7. Student exhibits an attitude of respect for classmates, faculty, and staff.
8. Students will not be disruptive or talk to each other during lectures, slide presentations, guest lectures, etc. Should this occur, the student will be asked to leave the classroom immediately.

Electronic and Recording Devices

All electronic devices such as cell phones or beeper/pagers are prohibited in this course. No tape recordings of the lecture during classroom or lab instruction will be allowed. Reading the assigned chapters prior to class and taking notes during lecture will assure proper coverage of chapters for preparation for daily and major examinations.

Emergency Contacts

Phone numbers that family members may use to reach you only in case of emergencies are as follows:

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| Jnita Collins - Course Director: | 356-3644 |
| Dental Hygiene Clinic Office: | 354-6050 |
| Dental Hygiene Clinic Dispensary | 354-6065 |
| Donna Cleere - Department Director | 354-6064 |
| Amarillo College Police: | 371-5163 |
| Kim Lacey - Allied Health Division Secretary: | 354-6055 |

Academic Grievances

A student who has a grievance concerning a course in which he or she is enrolled should make an appeal in the following order to the:

1. Instructor
2. Department chair
3. Division chair
4. Vice President / Dean of Instruction
5. College President

Dates of Importance

Dates of Importance for this Semester

Please refer to the attached schedule for the sequence of the course content. The schedule is subject to change. Any changes will be announced in class.

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|----------------|------------------------------------|
| September 5 | Labor Day Holiday (College Closed) |
| October 28 | In-Service Day (College Closed) |
| November 14 | Spring Registration Begins |
| November 24 | Last day to drop or withdraw |
| November 24-27 | Thanksgiving Holiday |
| December 12-15 | Final Exams Week |

DHYG 1301
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Verification of Course Policies

I, _____, verify that I have received the Orofacial Anatomy, Histology,
Please Print Name
and Embryology, DHYG 1301 course syllabus via the Amarillo College Dental Hygiene Program
website at www.actx.edu/~dental_hyg/syllabi.htm. I have read and understand the course and
department policies contained in the syllabus as they have been explained to me. I agree to
abide by the policies and course requirements documented in the syllabus.

_____ on _____
Student Signature Date

Received and filed in student file.

_____ on _____
Instructor Signature Date

Orofacial Anatomy, Histology, and Embryology

Course Outline and Schedule

| Date | Subject Content | Book Chapter |
|----------|---|--|
| 8/31/05 | Distribute Syllabus and Orientation The Oral Cavity The Tooth: Functions and Terms Fundamental and Preventive Curvatures: Proximal Alignment of the Teeth and Protection of the Periodontium | Ch. 1 Orofacial Ch. 2 Orofacial Ch. 3 Orofacial |
| 9/07/05 | Dentition Basic Tissues Development and Structure of Cells and Tissues Structure and Function of Cells, Tissues, and Organs | Ch. 4 Orofacial Ch. 17 Orofacial Ch. 1 Essentials Ch. 2 Essentials |
| 9/14/05 | Development of the Orofacial Complex Development of the Oral Facial Region Development of the Face and Palate Development, Form, and Eruption Eruption and Shedding of Teeth | Ch. 18 Orofacial Ch. 3 Essentials Ch. 4 Essentials Ch. 5 Orofacial Ch. 6 Essentials |
| 9/21/05 | Examination I Dental Lamina and Enamel Organ Development of Teeth Enamel Dentin & Pulp | Ch. 19 Orofacial Ch. 5 Essentials Ch. 20 Orofacial |
| 9/28/05 | Enamel Dentin Pulp Cementum Root Formation and Attachment Apparatus Root Morphology | Ch. 7 Essentials Ch. 8 Essentials Ch. 9 Essentials Ch. 10 Essentials Ch. 21 Orofacial Ch. 11 Orofacial |
| 10/05/05 | Eruption and Shedding of Teeth Supporting Structures Periodontium: Periodontal Ligament Periodontium: Alveolar Process and Cementum Oral Mucosa Oral Mucous Membrane The Tongue | Ch. 6 Essentials & Ch. 22 Orofacial Ch. 8 Orofacial Ch. 11 Essentials Ch. 12 Essentials Ch. 14 Essentials Ch. 23 Orofacial Ch. 24 Orofacial |
| 10/12/05 | Examination II Salivary Glands Salivary Glands Salivary Glands and Tonsils Occlusion Dental Anomalies | Ch. 33 Orofacial Ch. 25 Orofacial Ch. 15 Essentials Ch. 6 Orofacial Ch. 7 Orofacial |

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|----------|---|---|
| 10/19/05 | Clinical Considerations Tooth Identification Osteology of the Skull Nose, Nasal Cavity and Paranasal Sinuses | Ch. 9 Orofacial Ch. 10 Orofacial Ch. 26 Orofacial Ch. 27 Orofacial |
| 10/26/05 | Incisors Muscles of Mastication, Hyoid Muscles, and Sternocleidomastoid and Trapezius Muscles Muscles of Facial Expression | Ch. 12 Orofacial Ch. 28 Orofacial Ch. 30 Orofacial |
| 11/02/05 | Examination III Tempromandibular Joint Canines | Ch. 29 Essentials Ch. 13 Orofacial |
| 11/09/05 | Soft Palate and Pharynx Arterial Supply and Venous Drainage Molars | Ch. 31 Orofacial Ch. 32 Orofacial Ch. 15 Orofacial |
| 11/16/05 | Nervous System Lymphatics and Spread of Dental Infection Premolars | Ch. 34 Orofacial Ch. 35 Orofacial Ch. 14 Orofacial |
| 11/23/05 | Examination IV & Review | |
| 11/30/05 | Deciduous Dentition Review of All Teeth | Ch. 16 Orofacial |
| 12/07/05 | Final Tooth Identification Practical Examination | |
| 12/14/05 | Final Examination | |