

Biol 4385 Course Syllabus

Course Information

Course Title: BIO 4385: ORAL HISTOLOGY & EMBRYOLOGY

Term: Spring 2018

Days & Times: Monday and Wednesday, 8:30 -9:45 am, AD 2.232

Professor Contact Information

Dr. D. F. Murchison: *Office:* FN -3.204 *Hours:* Mon/Wed: 10:00-11:00 am, or by appointment

Phone: 972-883-4120 *Email:* david.murchison@utdallas.edu

Course Materials

Course materials will be posted on eLearning.

Course Pre-requisites, Co-requisites, and/or Other Restrictions

Prerequisites: BIOL 3301/3302 and BIOL/CHEM 3361 or their equivalents.

Course Description

BIOL 4385 Oral Histology & Embryology (3 semester hour) This course will provide exposure to and broad coverage of maxillofacial and oral histological structures and embryology of the face, neck, and teeth using lectures and electronic images of calcified and soft tissues cells.

Student Learning Objectives/Outcomes

Objectives: This course teaches students the structural organization of cells and tissues in the oral and maxillofacial regions. The students will understand relationships between structure and function, assess normal from abnormal histology, understand basic embryology of the face/neck/teeth, and will be exposed to the mechanisms of common orofacial developmental defects.

Outcomes: Upon completing this course, students will:

1. Define/differentiate the four basic tissue types and identify their location in the orofacial region.
2. Be able to describe common cell organelles and cellular mechanisms.
3. Differentiate epithelial tissues and specialized mucosa in the oral and nasal cavities
4. Describe and differentiate the histology of connective tissue, cartilage, bone, and adipose tissue.
5. Describe the role of neural crest cells and pharyngeal arches in orofacial development and growth.
6. Understand the histologic structure of enamel, dentin, cementum, and the dental pulp.
7. Describe and differentiate tooth supporting structures; periodontium, alveolar bone, & epithelium.
8. Understand the histologic structure of the salivary glands by structure & identify types of secretion.

Required Textbooks and Materials

Daniel J. Chiego, *Essentials of Oral Histology and Embryology*, Fourth Ed, 2014 (ISBN 9780323082563)

Suggested Course Materials

Student Learning Resources are available online: <http://evolve.elsevier.com/Chiego/oralhistology>

Additional didactic course material will be posted on eLearning;

Grading Policy

There will be four exams given in BIO 4V40 (identified in the schedule). The exam questions will be a combination of multiple-choice or short-answer questions. Each of the four exams will be worth 25% of the final grade, and each will cover material presented in class since the previous exam (lectures, handouts, illustrations/images, and assigned reading), for a total of 100%. Examinations must be taken at the scheduled time to ensure fair and equitable treatment for all students. Exceptions will be granted on in events of personal catastrophe or a medically incapacitating illness that must be documented. The course director must approve all exceptions. Unexcused absence from an exam will automatically result in an "F" grade for that exam. Final grades will be based on an A+ - F system.

Course Policies

Make-up exams

- MAKE EVERY EFFORT NOT TO MISS THE EXAMINATIONS. Makeup exams will be given only in case of a documented emergency and will be MORE DIFFICULT than the regularly scheduled exam. You must contact the Course Director within 24 hours of the missed exam.

Assignments & Academic Calendar

SCHEDULE OF LECTURES

Bio 4385, Spring 2018

Date	Session	Reading	Topics
Mon, Jan 8	1	Chapter 1 –pgs 1-4	Course Introduction and Development of Cells and Tissues
Wed, Jan 10	2	Chapter 1 – pgs 10-17	Development and Structure of Cells and Tissues
Mon, Jan 15			Holiday: Dr. Martin Luther King Day
Wed, Jan 17	3	Chapter 2 – pgs 18-27	Structure of Oral Tissues
Mon, Jan 22	4	Chapter 2 – pgs 28-36	Structure of Oral Tissues
Wed, Jan 24	5	Chapter 3 – pgs 37-43	Development of the Oral Facial region
Mon, Jan 29	6	Chapter 3 – pgs 44-49	Development of the Oral Facial region
Wed, Jan 31	7	Chapters 1-3	Review Session
Mon, Feb 5	8		EXAM 1 (Chapters 1, 2, 3)
Wed, Feb 7	9	Chapter 4 – pgs 50-54	Development of the Face and Palate
Mon, Feb 12	10	Chapter 4 – pgs 55-60	Development of the Face and Palate
Wed, Feb 14	11	Chapter 5 – pgs 61-76	Development of Teeth
Mon, Feb 19	12	Chapter 6 – pgs 81-95	Development/Eruption of Teeth
Wed, Feb 21	13	Chapters 4-6	Review Session
Mon, Feb 26	14		EXAM 2 (Chapters 4, 5, 6)
Wed, Feb 28	15	Chapter 7 – pgs 92-100	Enamel
Mon, Mar 5	16	Chapter 8 – pgs 101-112	Enamel (2); Dentin
Wed, Mar 7	17	Chapter 8 – pgs 101-112	Dentin (2)
Mon, Mar 12			Spring Break
Wed, Mar 14			Spring Break
Mon, Mar 19	18	Chapter 9 – pgs 113-119	Dental Pulp
Wed, Mar 21	19	Chapter 9 – pgs 120-127	Dental Pulp
Mon, Mar 26	20	Chapt 10 – pgs 128-135	Cementum
Wed, Mar 28	21	Chapters 7-10	Review Session
Mon, Apr 2	22		EXAM 3 (Chapters 7, 8, 9, 10)
Wed, Apr 4	23	Chapter 13 – pgs 156-165	Temporomandibular Joint

Mon, Apr 9	24	Chapter 11 – pgs 136-146	Periodontium & Periodontal Ligament
Wed, Apr 11	25	Chapter 12 – pgs 147-155	Periodontium (2)
Mon, Apr 16	26	Chapter 14 – pgs 166-176	Oral Mucosa
Wed, Apr 18	27	Chapter 14 –pgs 177-183 Chapter 15 – pgs 184-195	Oral Mucosa (2), Salivary Glands
Mon, Apr 23	28	Chapters 11-15	Review Session
Wed, Apr 25	29		EXAM 4 (Chapters 11, 12, 13, 14, 15)

Student Conduct & Discipline

The University of Texas System and The University of Texas at Dallas have rules and regulations for the orderly and efficient conduct of their business. It is the responsibility of each student and each student organization to be knowledgeable about the rules and regulations which govern student conduct and activities. General information on student conduct and discipline is contained in the UTD publication, *A to Z Guide*, which is provided to all registered students each academic year.

The University of Texas at Dallas administers student discipline within the procedures of recognized and established due process. Procedures are defined and described in the *Rules and Regulations, Board of Regents, The University of Texas System, Part I, Chapter VI, Section 3*, and in Title V, Rules on Student Services and Activities of the university's *Handbook of Operating Procedures*. Copies of these rules and regulations are available to students in the Office of the Dean of Students, where staff members are available to assist students in interpreting the rules and regulations (SU 1.602, 972/883-6391).

A student at the university neither loses the rights nor escapes the responsibilities of citizenship. He or she is expected to obey federal, state, and local laws as well as the Regents' Rules, university regulations, and administrative rules. Students are subject to discipline for violating the standards of conduct whether such conduct takes place on or off campus, or whether civil or criminal penalties are also imposed for such conduct.

Academic Integrity

The faculty expects from its students a high level of responsibility and academic honesty. Because the value of an academic degree depends upon the absolute integrity of the work done by the student for that degree, it is imperative that a student demonstrate a high standard of individual honor in his or her scholastic work.

Scholastic dishonesty includes, but is not limited to, statements, acts or omissions related to applications for enrollment or the award of a degree, and/or the submission as one's own work or material that is not one's own. As a general rule, scholastic dishonesty involves one of the following acts: cheating, plagiarism, collusion and/or falsifying academic records. Students suspected of academic dishonesty are subject to disciplinary proceedings.

Plagiarism, especially from the web, from portions of papers for other classes, and from any other source is unacceptable and will be dealt with under the university's policy on plagiarism (see general catalog for details). This course will use the resources of turnitin.com, which searches the web for possible plagiarism and is over 90% effective.

Email Use

The University of Texas at Dallas recognizes the value and efficiency of communication between faculty/staff and students through electronic mail. At the same time, email raises some issues concerning security and the identity of each individual in an email exchange. The university encourages all official student email correspondence be sent only to a student's U.T. Dallas email address and that faculty and staff consider email from students official only if it originates from a UTD student account. This allows the university to maintain a high degree of confidence in the identity of all individual corresponding and the security of the transmitted information. UTD furnishes each student with a free email account that is to be used in all communication with university personnel. The Department of Information Resources at U.T. Dallas provides a method for students to have their U.T. Dallas mail forwarded to other accounts.

Withdrawal from Class

The administration of this institution has set deadlines for withdrawal of any college-level courses. These dates and times are published in that semester's course catalog. Administration procedures must be followed. It is the student's responsibility to handle withdrawal requirements from any class. In other words, I cannot drop or withdraw any student. You must do the proper paperwork to ensure that you will not receive a final grade of "F" in a course if you choose not to attend the class once you are enrolled.

Student Grievance Procedures

Procedures for student grievances are found in Title V, Rules on Student Services and Activities, of the university's *Handbook of Operating Procedures*.

In attempting to resolve any student grievance regarding grades, evaluations, or other fulfillments of academic responsibility, it is the obligation of the student first to make a serious effort to resolve the matter with the instructor, supervisor, administrator, or committee with whom the grievance originates (hereafter called "the respondent"). Individual faculty members retain primary responsibility for assigning grades and evaluations. If the matter cannot be resolved at that level, the grievance must be submitted in writing to the respondent with a copy of the respondent's School Dean. If the matter is not resolved by the written response provided by the respondent, the student may submit a written appeal to the School Dean. If the grievance is not resolved by the School Dean's decision, the student may make a written appeal to the Dean of Graduate or Undergraduate Education, and the dean will appoint and convene an Academic Appeals Panel. The decision of the Academic Appeals Panel is final. The results of the academic appeals process will be distributed to all involved parties.

Copies of these rules and regulations are available to students in the Office of the Dean of Students, where staff members are available to assist students in interpreting the rules and regulations.

Incomplete Grade Policy

As per university policy, incomplete grades will be granted only for work unavoidably missed at the semester's end and only if 70% of the course work has been completed. An incomplete grade must be resolved within eight (8) weeks from the first day of the subsequent long semester. If the required work to complete the course and to remove the incomplete grade is not submitted by the specified deadline, the incomplete grade is changed automatically to a grade of F.

Disability Services

The goal of Disability Services is to provide students with disabilities educational opportunities equal to those of their non-disabled peers. Disability Services is located in room 1.610 in the Student Union. Office hours are Monday and Thursday, 8:30 a.m. to 6:30 p.m.; Tuesday and Wednesday, 8:30 a.m. to 7:30 p.m.; and Friday, 8:30 a.m. to 5:30 p.m.

The contact information for the Office of Disability Services is:

The University of Texas at Dallas, SU 22

PO Box 830688

Richardson, Texas 75083-0688

Phone: (972) 883-2098 (voice or TTY)

Essentially, the law requires that colleges and universities make those reasonable adjustments necessary to eliminate discrimination on the basis of disability. For example, it may be necessary to remove classroom prohibitions against tape recorders or animals (in the case of dog guides) for students who are blind. Occasionally an assignment requirement may be substituted (for example, a research paper versus an oral presentation for a student who is hearing impaired). Classes enrolled students with mobility impairments may have to be rescheduled in accessible facilities. The college or university may need to provide special services such as registration, note-taking, or mobility assistance.

It is the student's responsibility to notify his or her professors of the need for such an accommodation. Disability Services provides students with letters to present to faculty members to verify that the student has a disability and needs accommodations. Individuals requiring special accommodation should contact the professor after class or during office hours.

Religious Holy Days

The University of Texas at Dallas will excuse a student from class or other required activities for the travel to and observance of a religious holy day for a religion whose places of worship are exempt from property tax under Section 11.20, Tax Code, Texas Code Annotated.

The student is encouraged to notify the instructor or activity sponsor as soon as possible regarding the absence, preferably in advance of the assignment. The student, so excused, will be allowed to take the exam or complete the assignment within a reasonable time after the absence: a period equal to the length of the absence, up to a maximum of one week. A student who notifies the instructor and completes any missed exam or assignment may not be penalized for the absence. A student who fails to complete the exam or assignment within the prescribed period may receive a failing grade for that exam or assignment.

If a student or an instructor disagrees about the nature of the absence [i.e., for the purpose of observing a religious holy day] or if there is similar disagreement about whether the student has been given a reasonable time to complete any missed assignments or examinations, either the student or the instructor may request a ruling from the chief executive officer of the institution, or his or her designee. The chief executive officer or designee must take into account the legislative intent of TEC 51.911(b), and the student and instructor will abide by the decision of the chief executive officer or designee.

Off-Campus Instruction and Course Activities

Off-campus, out-of-state, and foreign instruction and activities are subject to state law and University policies and procedures regarding travel and risk-related activities. Information regarding these rules and regulations may be found at the website address given below. Additional information is available from the office of the school dean. (http://www.utdallas.edu/Business_Affairs/Travel_Risk_Activities.htm)

These descriptions and timelines are subject to change at the discretion of the Professor.