

**University of Nevada Las Vegas
School of Dental Medicine**

Course Syllabus

DEN 7101 – Human Structure and Function

Credit Hours: 4 Contact Hours: 52

1) GENERAL INFORMATION

- a. Department: Biomedical Science
- b. Designation: Physiology/Anatomy/Biochemistry/Cell Biology
- c. Type: Required
- d. Day and Time Course Offered: Wednesday and Friday 10 am to 12 pm
- e. Location(s) of Class: B1 classroom

2) COURSE DESCRIPTION

Human Structure and Function integrates the disciplines of biochemistry, cell biology, general microanatomy, and physiology. Since form and function are interrelated, this course moves from the cell through tissues to organ systems presenting the cellular and histologic structure of tissues and organs and relating the structure to function. The integrated homeostatic relationship of body systems is also discussed. Special consideration is given to those areas specifically related to dentistry and oral health.

Prerequisites: In order to enroll in this course, the student must be eligible for admission to UNLV SDM, and have the basic requirements for admission to dental school, including biochemistry, or by special permission of the course director.

3) LEARNING RESOURCES

a. Required texts

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| <p>i. <u>Textbook of Medical Physiology</u>
Resource Type: Book
Primary Author: Guyton and Hall
Edition/Version: 11</p> | <p>ii. <u>Color Atlas of Histology and Color
Textbook of Histology</u>
Resource Type: Book
Primary Author: Gartner
Edition/Version: 4 and 3</p> |
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b. Recommended texts

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| <p>i. <u>Physiology</u>
Resource Type: Book
Primary Author: Berne & Levy</p> | <p>Edition/Version: 6
ii. <u>Biochemistry</u>
Resource Type: Book</p> |
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Primary Author: Stryer

Edition/Version: 6

c. Other:

Powerpoint lectures, WebCT, and SharePoint

4) PARTICIPATING FACULTY

5) COURSE GOALS AND OBJECTIVES

- 1) The student will be able to explain the cellular, biochemical, physiological and anatomical concepts related to the musculoskeletal, nervous, cardiovascular, respiratory, digestive, urinary and endocrine systems.
- 2) The student will build a foundational knowledge base in human physiology and microscopic anatomy.
- 3) The student will be able to describe the relationship between structure and function.
- 4) The student will be able to critically evaluate relevant scientific literature based on their understanding of biochemical cellular, physiological and anatomical concepts.

6) SDM COMPETENCIES ADDRESSED/SUPPORTED

1. develop principles of ethical reasoning and professional responsibility as they pertain to the academic environment, patient care, practice management, and research.
2. demonstrate self-assessment, critical thinking, and problem-solving skills related to the comprehensive care of patients.
3. promote oral and systemic health of patients within private practice and within the community.
4. assess, diagnose, and perform treatment planning for individual patients of all ages.
5. treat or manage periodontal and peri-implant tissues.
6. restore defective teeth to form, function, and acceptable esthetics.
7. replace missing teeth to form, function, and acceptable esthetics.
8. treat or manage pulpal and periradicular disorders.
9. treat or manage oral mucosal, bone, and temporomandibular disorders.
10. perform uncomplicated oral hard and soft tissue surgical procedures.
12. treat or manage orofacial pain and anxiety.
13. recognize, prevent, diagnose and treat or manage dental and medical emergencies encountered in dental practice.

7) EVALUATION

a. Grading Scale

- i. A = 90-100
- ii. B = 80-89.9
- iii. C = 70-79.9
- iv. F = below 70

b. Examinations/Quizzes

There will be 3 examinations, participation in a laboratory notebook, and a laboratory practical exam. Written examinations will be administered according to the American Dental Association testing guidelines and students will have 54 seconds per test item to complete the exam. Practical examinations will be administered with the total time allotted for completion equal to the number of slides (questions) times 1 minute (i.e. one minute per slide). An average student would normally require 15 seconds per slide for visual identification of the histological structures. Student's will participate in the microanatomy notebook during both semesters of DEN 7101 but will receive final credit during the spring semester. **EACH SEMESTER WILL RECEIVE AN INDEPENDENT GRADE based upon standard SDM grading scale policy.**

c. Grade Determination**Fall**

30%	Examination 1
30 %	Examination 2
30%	Examination 3
10%	Laboratory Practical

d. Posting/Notification of Grades

Examination scores will be posted to WebCT and summary sheets showing incorrect responses will be placed in the students' SDM mailboxes. Examinations will not be returned to the students; however, students can review the examinations by contacting the Biomedical Sciences administrative assistants. Once the examination grades have been posted, the students will have 3 business days to dispute any inconsistencies.

e. The UNLV SDM Student Handbook, III: UNLV School of Dental Medicine Student Code of Professional Responsibilities and Appendices outline the professional behavior expected of students attending UNLV SDM. Failure to act in a professional manner, as determined by faculty, may affect a course grade. Unprofessional conduct may result in failure of course.

8) COURSE SCHEDULE (INSTRUCTIONAL SESSIONS)

Date	Time	Topic	Lecturer
9/12 (Mon)	10-12	Introduction and Course Policies DEN7111 and DEN7101: Intro to Virtual Microscope and Histology	
9/14 (Wed)	10-12	Biomolecules	
9/15 (Thurs)	10-12	Intro to the Cell and Cell Biology:Membranes	
9/16 (Fri)	10-12	Cell Biology:Cytoskeleton	
9/19 (Mon)	10-12	Cell Biology:Extracellular matrix	
9/21 (Wed)	10-12	Epithelium and Glands	
9/22 (Thurs)	10-12	Intro to Connective Tissue, Cartilage and Bone	
9/23 (Fri)	10-12	Muscle Tissue	
9/26 (Mon)	10-12	Exam 1	
10/12	10-12	DNA/ Cell cycle	
10/14	3-5	DNA/Cell Cycle	
10/19	10-12	Protein Synthesis	
10/21	10-12	Receptors	
10/26	10-12	Introduction to Metabolism	
10/28	10-12	Metabolism	
11/02	10-12	Bioenergetics	
11/04	10-12	LAB: Epithelium and Connective Tissue	
11/09	10-12	Exam 2	
11/11		Veterans Day	
11/16	10-12	Integument	
11/18	10-12	LAB: Cartilage, Bone, and Muscle	
11/23	10-12	Cartilage and Bone, Osteogenesis	
11/25	10-12	Thanksgiving Holiday	
11/30	10-12	Hard Tissue Biochemistry	
12/02	10-12	Calcium Metabolism	
12/07	10-12	Endocrine 1	
12/09	10-12	Endocrine 2	
12/14	10-12	LAB: Integument and Endocrine	
12/16	10-12	Exam 3 and Lab Practical	

9) SPECIFIC CLASS POLICIES AND PROCEDURES

a. Attendance Policy

You are expected to attend all classes unless excused in accordance with the provisions set forth below. It is the personal responsibility of the student to consult with the professor regarding absence(s) from class. You are expected to notify the Office of Student Affairs by phone or e-mail prior to an absence. In the case of unexpected emergencies, notify the Office of Student Affairs as soon as possible afterwards. You can be administratively dropped from the class after four (4) absences without instructor notification. Absences will be approved only for reasons of illness or emergencies of the student or immediate family, religious observance, jury duty, and participation in approved activities, such as those involving national organizations and professional activities. Family reunions, days off for recreation, travel, social events, additional vacation etc., are not reasons for approved absence.

b. Other Class Specific Policies

Attendance, class participation, and general professional behavior will be expected at all times. Professionalism is an expectation. You are now in a professional school and are expected to act accordingly. Lack of professional decorum in class may result in points being subtracted from the total grade. Especially egregious conduct may result in the student receiving a failing grade regardless of his/her academic performance.

It is a faculty member's discretion and prerogative to determine what is and is not acceptable behavior in his or her classroom (i.e., late arrival, wearing hats) (See "professionalism" above). Also, classroom occupants are at the discretion of the instructor (per UNLV General Counsel). For more information about classroom policies, go to <http://studnetlife.unlv.judicial.student.html>.

Unprofessional acts may include, but are not limited to, being late for class, being disruptive in class, wearing inappropriate clothing or slovenly appearance. At no time is the wearing of caps/hats permitted in the classroom unless for religious reasons. While comfort is important when you are sitting in class all day long, comfortable clothes can be neat, clean, and professional appearing. You are not permitted to wear T-shirts with inappropriate logos. Men are not allowed to wear tank-tops, sleeveless shirts, or gym shorts. Flip-flops are not allowed on anyone. Appropriate shoes, including tennis shoes, are accepted. Men are not to wear any footwear in which any portion of their feet are exposed (e.g., sandals). Women are likewise expected to wear appropriate clothing and shoes as well.

ELECTRONIC DEVICES IN THE CLASSROOM

There are no electronic or recording devices of any kind allowed to be operative in any class session. Amongst the devices not allowed is any IPOD or MP3 device, any cell phone, any video recording device, any PDA or any other

electronic device not mentioned but possessing the same capabilities. In addition, unless specifically authorized by the course director, no computers of any sort may be used by students during any class session. The only exception to this rule is that students may use audio recording devices with the expressed written permission of the course director.

10) UNIVERSITY WIDE POLICIES/PROCEDURES

Academic Misconduct—(Please note that this is addressed in the 2016-2017 SDM Student Manual.) Academic integrity is a legitimate concern for every member of the campus community; all share in upholding the fundamental values of honesty, trust, respect, fairness, responsibility and professionalism. By choosing to join the UNLV community, students accept the expectations of the Student Academic Misconduct Policy and are encouraged when faced with choices to always take the ethical path. Students enrolling in UNLV assume the obligation to conduct themselves in a manner compatible with UNLV's function as an educational institution. An example of academic misconduct is plagiarism. Plagiarism is using the words or ideas of another, from the Internet or any source, without proper citation of the sources. See the *Student Academic Misconduct Policy* (approved December 9, 2005) located at: <https://www.unlv.edu/studentconduct/student-conduct>.

Copyright—The University requires all members of the University Community to familiarize themselves **with** and to follow copyright and fair use requirements. **You are individually and solely responsible for violations of copyright and fair use laws. The university will neither protect nor defend you nor assume any responsibility for employee or student violations of fair use laws.** Violations of copyright laws could subject you to federal and state civil penalties and criminal liability, as well as disciplinary action under University policies. Additional information can be found at: <http://www.unlv.edu/provost/copyright>.

Disability Resource Center (DRC)—The UNLV Disability Resource Center (SSC-A 143, <http://drc.unlv.edu/>, 702-895-0866) provides resources for students with disabilities. If you feel that you have a disability, please make an appointment with a Disabilities Specialist at the DRC to discuss what options may be available to you. If you are registered with the UNLV Disability Resource Center, bring your Academic Accommodation Plan from the DRC to the instructor during office hours so that you may work together to develop strategies for implementing the accommodations to meet both your needs and the requirements of the course. Any information you provide is private and will be treated as such. To maintain the confidentiality of your request, please do not approach the instructor in front of others to discuss your accommodation needs.

Religious Holidays Policy—Any student missing class quizzes, examinations, or any other class or lab work because of observance of religious holidays shall be given an opportunity during that semester to make up missed work. The make-up will apply to the religious holiday absence only. It shall be the responsibility of the student to notify the **instructor within the first 14 calendar days of the course for fall and spring courses (excepting modular courses), or within the first 7 calendar days of the course for summer and modular courses**, of his or her intention to participate in religious holidays which do not fall on state holidays or periods of class recess. For additional information, please visit: <http://catalog.unlv.edu/content.php?catoid=6&navoid=531>.

Incomplete Grades—The grade of I—Incomplete—can be granted when a student has satisfactorily completed three-fourths of course work for that semester/session but for reason(s) beyond the student’s control, and acceptable to the instructor, cannot complete the last part of the course, and the instructor believes that the student can finish the course without repeating it. The incomplete work must be made up before the end of the following regular semester for undergraduate courses. Graduate students receiving “I” grades in 500-, 600-, or 700-level courses have up to one calendar year to complete the work, at the discretion of the instructor. If course requirements are not completed within the time indicated, a grade of F will be recorded and the GPA will be adjusted accordingly. Students who are fulfilling an Incomplete do not register for the course but make individual arrangements with the instructor who assigned the I grade.

Tutoring and Coaching--Peer tutoring is available through the Office of Student Affairs at no cost. Please fill out the appropriate forms which can be picked up there. If need be, a referral can be made from Student Affairs to the Academic Success Center, CAP, or DRC on the main campus.

UNLV Writing Center—One-on-one or small group assistance with writing is available free of charge to UNLV students at the Writing Center, located in CDC-3-301. Although walk-in consultations are sometimes available, students with appointments will receive priority assistance. Appointments may be made in person or by calling 702-895-3908. The student’s Rebel ID Card, a copy of the assignment (if possible), and two copies of any writing to be reviewed are requested for the consultation. More information can be found at: <http://writingcenter.unlv.edu/>.

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Rebelmail—By policy, faculty and staff should e-mail students’ Rebelmail accounts only. Rebelmail is UNLV’s official e-mail system for students. It is one of the primary ways students receive official university communication such as information about deadlines, major campus events, and announcements. All UNLV students receive a Rebelmail account after they have been admitted to the university. Students’ e-mail prefixes are listed on class rosters. The suffix is always @unlv.nevada.edu. Emailing within WebCampus is acceptable but not a reliable way of communicating with your instructors at SDM. **Please note that SDM does not rely on Rebelmail. SDM has its own email system and is used as the primary means of communication between faculty and staff with the students.**

Falsification of Documents or Other Information -The UNLV Student Conduct Code and the UNLV School of Dental Medicine prohibits the forgery and falsification of any documents or records. This includes, but is not limited to, the forging, altering, misusing, providing or causing any false information to be entered on ANY University or School of Dental Medicine PRINTED OR ELECTRONIC documents, records (including patient records), or identification cards. The falsification of data, improper assignment of authorship of school work or other scholarly activity, claiming another person’s work as one’s own, unprofessional manipulation of experiments or of research procedures, or misappropriation of research funds will not be tolerated. Commission of any act of forgery or falsification as described will result in disciplinary action and sanctions as stated in the School of Dental Medicine Honor Code.

SDM E-Mail - By policy, faculty and staff should only e-mail students SDMail accounts. SDMail is the UNLV School of Dental Medicine official e-mail system for students. It is the one of the

primary ways students receive official university communication. All UNLV SDM students receive an SDMail account after admission to SDM. As a reminder, sending information by e-mail should be done in an appropriate and professional manner.

Consensual Relationships - UNLV prohibits romantic or sexual relationships between members of the university community when one of the individuals involved has direct professional influence or direct authority over the other. For further information, go to <http://hr.unlv.edu/Policy/consensual.html> .