

Essential Human Anatomy BIOL 838, Spring 2020

Instructor

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Course Description

Human anatomy including essential aspects of functional morphology will be covered. Topics covered may include the anatomical aspects of the integumentary, skeletal, muscular, nervous, endocrine, circulatory, lymphatic, respiratory, urinary, digestive and reproductive systems. Details of specific anatomical regions will be required.

RECOMMENDATIONS: A good course for students with little knowledge of human anatomy. Also useful for students interested in teaching high school AP courses, community college anatomy and physiology, or needing a continuing education course.

Learning Objectives

1. Students will develop knowledge of the topology of the human anatomical systems (point and name → gross anatomy).
2. An understanding of the functional morphology (basic functions) of each human anatomical system will be gained.
3. The interdependence of each anatomical system will be discussed (example, requirements of the skeletal, muscular and nervous systems for coordination of movements).
4. Students will develop a deeper appreciation for the anatomical sciences through common readings and detailed exercises.

Course Materials

Textbook: Most materials will be provided electronically. However, students will need a copy of the following book:

Roach, Mary. 2003. *Stiff: The Curious Lives of Cadavers*. W.W. Norton and Company, New York, ISBN-13: 978-0393324822 ISBN-10: 0393324826.

Students are encouraged to obtain a used copy if available from their favorite online book vendor (mine was about \$10 with free shipping).

Also, it is recommended that students obtain a high quality Anatomy and Physiology textbook. Many good texts are available, but I tend to use the following:

Saladin, K.S., *Anatomy and Physiology: The Unity of Form and Function*, 5th Edition, McGraw Hill, Boston, 2009/2010 (ISBN 978-0-07-352569-3).

Again, I encourage the use of low cost used textbooks, but students are free to get newer editions of just about any Anatomy and Physiology text that they wish.

Computer and Software: Access to a computer, modern browser and Internet connection are required for the course. A word processor compatible with the instructor's software is needed for preparation of written assignments. Details for submitting electronic documents will be provided with each written assignment.

Digital Imaging Device: Some method of producing digital images may be required for incorporating digital images into assignments. Good solutions include a flatbed scanner, digital camera, etc. I suggest that students not buy anything if possible as a photo from a cell phone will often produce satisfactory results.

Web Resources: Canvas, an online learning management system (LMS), is used for this course. Students will be responsible for becoming proficient at using the system. Instructions can be found online by searching the eCampus section of the University of Nebraska at Kearney web site. Students will be expected to check the course website often for announcements and assignments. In addition, students are required to use and check the email account assigned to them by the university (Lopermail).

Lecture AVIs and Study Notes: Lectures are supplied as HTML5 video that will likely only be compatible with a recent Firefox web browser. Support for mobile devices will be hit or miss, but students will be able to download the video if streaming does not work as anticipated. Note that much of the provided material is copyrighted by the authors. *Students should refrain from distributing the resources to others without proper permission from the copyright owner(s).* All links and access to course materials will expire shortly after the last day of class.

Legal: *The materials on this course website are only for the use of students enrolled in this course for purposes associated with this course and may not be retained or further disseminated. The materials on this course website may be protected by copyright, and any further use of this material may be in violation of federal copyright law.*

Grading

Worksheets: Multiple exercises to encourage consistent engagement in the course and to provide the needed repetition for learning general anatomy. Students will upload a file for grading. Students often use a scan, photographs, doc, pdf, or other software to complete the assignments. In general, I am flexible on the format, provided I can view the student's work.

Quizzes: Numerous online quizzes are assigned throughout the semester and must be completed by the due date. Each quiz has a time limit.

Mini-Assignments: Students will complete several mini-assignments. The topics will be assigned by the instructor. Typically, the assignment is to enhance the basic knowledge of anatomy and functional morphology of the human body or to enhance the understanding of specific concepts in modern anatomical sciences.

Common Readings: Students assess anatomy related topic or topics which may be a textbook, video series, or other information source. Points may (or may not) be divided into separate activities such as quizzes, written summaries and/or discussions.

Online Exams: Multiple time-limited online exams will be given. All exams are closed book and have a time limit. If the exam has a take home component, the permitted use of outside resources will be defined in the instructions.

Final Exam: Students will be provided with the exam approximately one week before the due date. Late exams will not be accepted. The final exam is comprehensive and may contain any information covered in the course.

Tentative Point Distribution: Anticipated assignments with distribution of points for the course. Changes may be made at the discretion of the instructor.

<u>Assignment</u>	<u>Points Each</u>	<u>Total Points</u>
Worksheets	18 @ 10 pts	180 pts
Quizzes	18 @ 10 pts	180 pts
Mini-assignments	11 @ 10 pts	110 pts
Common Readings	4 @ 20 pts	80 pts
Online Exams	3 @ 100 pts	300 pts
Final Exam	1 @ 150	150 pts
	total	1000 pts

The final grade will be determined base on the number of earned points. **Percentages are not used when assigning final letter grades for the course.** In the event that assignments are changed, the scores will be normalized to 1000 pts (points earned / total possible x 1000). Grades will be assigned as follows:

A+ (1000-990), A (989-960), A- (959-930), B+ (929-900), B (899-870), B- (869-840), C+ (839-810), C (809-780), C- (779-750), D+ (749-720), D (719-690), D- (689-660), F (Below 659)

Course Information and Policies

Expectations: Because students admitted to the graduate program in biology have significant exposure to biology, related disciplines (math, chemistry, physics, etc.) and general education coursework (English, writing, grammar, geography, history, etc.), it is anticipated that previously developed skills and knowledge will be utilized extensively throughout the course and reflected in the student's academic performance. Students are required to maintain a professional and cordial mannerism when communicating with the instructor and other students.

Due Dates: *Due dates will be clearly identified on Canvas and strictly enforced.* Students are strongly encouraged to complete assignments several hours (if not days) before due. There will be no opportunity to make up missed quizzes, assignments or exams, and a score of zero will be assessed. Assignments submitted by email after the assignment link has expired in Canvas will only be accepted at the discretion of the instructor. The final exam must be submitted by the due date or a grade of zero will be given. In the rare instances that material is accepted late, students will be assessed a late penalty (minimum of 10% for each day late).

Note on Technology: While not common, problems with technology do happen. This can be caused by instructor error, server crashes, weather-related power outages or problems with Internet connections. Verified problems with course technology will be dealt with fairly. If you find that the Canvas service is not responding or behaving improperly, notify the instructor immediately. If the problem is reasonably beyond the student's control, an opportunity to reclaim missed points *may* be provided. While instructors generally attempt to be helpful with the resolution of computer related problems, the operation of each student's personal computer is the sole responsibility of the student (i.e. virus protection, operating system maintenance and configuration, software installation, etc.), and user-specific issues are normally resolved through interaction with the UNK helpdesk.

Other Policies of Interest

Exams and Quizzes: All online evaluations are ***closed book unless specified otherwise***. It is expected that students will not utilize notes, textbooks, the Internet, or any other source of information during an assessment. Note that use of the Internet during a quiz or exam has been the most commonly detected source of academic dishonesty by students. Point challenges will only be considered for 3 days after the due date and must be well supported by citing sources (short paragraph indicating why the question is mismarked). Fishing for points at the end of the semester will not be tolerated or considered for altering the points earned to letter grade mapping.

Plagiarism and Academic Dishonesty: Presenting someone else's work as your own is a serious academic offense. Any material containing plagiarism or reflecting academic dishonesty will receive a grade of zero and result in placing a record of the offense in the department's file. A second offense will result in assignment of an "F" for the course. All instances of plagiarism or academic dishonesty carry the risk of referral to the graduate committee, review of the student's file, and potentially expulsion from the program.

Withdraw and Incomplete Grades: Students should consult the academic calendar for the last day to withdraw from a course which will result in a grade of "W". Instructors are not permitted to withdraw a student; therefore, any student not continuing the class that fails to withdraw will receive a grade of "F". If unusual circumstances prevent completion of a course (such as major hospitalization, overseas deployment, etc.), students may request a grade of incomplete. *At the sole discretion of the instructor*, an "I" may be assigned for the course, and the the instructor will provide the student with an enumeration of requirements with a deadline for completing the course. Grades of incomplete are not for improving course performance and normally will not be considered for students not passing at the time of the request.

Students with Disabilities

It is the policy of the University of Nebraska at Kearney to provide flexible and individualized reasonable accommodation to students with documented disabilities. To receive accommodation services for a disability, students must be registered with UNK Disabilities Services for Students Office, 172 Memorial Student Affairs Building, 308-865-8988 or by email unkdso@unk.edu

Students Who are Pregnant

It is the policy of the University of Nebraska at Kearney to provide flexible and individualized reasonable accommodation to students who are pregnant. To receive accommodation services due to pregnancy, students must contact Cindy Ference in Student Health, 308-865-8219. The following link provides information for students and faculty regarding pregnancy rights. <http://www.nwlc.org/resource/pregnant-and-parenting-students-rights-faqs-college-and-graduate-students>

Reporting Student Sexual Harassment, Sexual Violence or Sexual Assault

Reporting allegations of rape, domestic violence, dating violence, sexual assault, sexual harassment, and stalking enables the University to promptly provide support to the impacted student(s), and to take appropriate action to prevent a recurrence of such sexual misconduct and protect the campus community. Confidentiality will be respected to the greatest degree possible. Any student who believes she or he may be the victim of sexual misconduct is encouraged to report to one or more of the following resources:

Local Domestic Violence, Sexual Assault Advocacy Agency 308-237-2599

Campus Police (or Security) 308-865-8911

Title IX Coordinator 308-865-8655

Retaliation against the student making the report, whether by students or University employees, will not be tolerated.

If you have questions regarding the information in this email please contact **Mary Chinnock Petroski, Chief Compliance Officer** (petroskimj@unk.edu or phone 8400).

Tentative Schedule

Sequence and any dates are tentative and subject to change by the instructor. Details of the readings and other assignments will be posted on the LMS (Canvas).

<u>Week / Date</u>	<u>Topics / Notes</u>	<u>Assignments</u>
1 / January 13	Introduction Anatomical Terminology Methods and Medical Imaging	Worksheet 01 Quiz 01
2 / January 20	Types of Tissues Integumentary System	Worksheet 02 Quiz 02 mA (contrast agents, 01)
3 / January 27	Skeletal System	Worksheet 03 Quiz 03 Reading (Roach, 01)
4 / February 3	Skeletal System	Worksheet 04 Quiz 04 mA (skeletal system, 02)
5 / February 10	Joints	Worksheet 05 Quiz 05 mA (joints, 03) Exam I
6 / February 17	Muscular System	Worksheet 06 Quiz 06 Reading (Roach, 02)
7 / February 24	Muscular System	Worksheet 07 Quiz 07 mA (muscles, 04)
8 / March 2	Nervous System	Worksheet 08 Quiz 08 Reading (Roach, 03)
9 / March 9	Nervous System	Worksheet 09 Quiz 09 mA (nervous system, 05)
10 / March 16	Endocrine System	Worksheet 10 Quiz 10 mA (endocrine system, 06) Exam II
11 / March 23	Spring Break, 3/23-3/27	
12 / March 30	Cardiovascular System	Worksheet 11 Quiz 11 mA (cardiovascular, 07) Reading (Roach, 04)

13 / April 6	Cardiovascular System	Worksheet 12 Quiz 12 mA (cardiovascular, 08)
14 / April 13	Lymphatic System Respiratory System	Worksheet 13 Quiz 13 Worksheet 14 Quiz 14 mA (respiratory / lymphatic, 09)
15 / April 20	Digestive System Urinary System	Worksheet 15 Quiz 15 Worksheet 16 Quiz 16 mA (digestion / urinary, 10) Exam III
16 / April 27	Reproductive Systems Human Development	Worksheet 17 Quiz 17 Worksheet 18 Quiz 18 mA (reproductive systems, 11)
17 / May 4	Finals Week (5/4 - 5/7)	Final Exam
Last Day of Course	Note this is on a Thursday afternoon. Course closes and becomes unavailable a few days later.	

Q=quiz, W=worksheet, mA=miniAssignment, CR=common reading