

Course Description

This course is an introduction to gross, microscopic, and functional anatomy of the organ systems of the human body. Successful completion of all remedial courses is a prerequisite for this course; BIOL 1010/1020 or BIOL 1050 are recommended prerequisites. The lecture and lab are combined into a single grade. While lecture and lab are related, the material covered in each may differ in content and/or focus.

It is presumed that you have a fundamental understanding of biology from previous courses. If not, you should review cell structure and function (one of the first chapters in most anatomy texts).

Course Objectives

- Understand the organization of the human body, the major features and interrelationships of the organ systems, and the relationship of structure and function
- Visualize the internal anatomy, both gross and microscopic, and to relate this to surface features
- Understand lectures, texts, articles, and/or clinical demonstrations in subsequent classes
- Understand the nature of science and to the biological significance of animal structure
- Develop care in verbal expression, especially the precise use of terminology

Required Texts/Materials

- Jones, T. D. *Human Anatomy Laboratory Manual*, Spring/Summer 2017 (available on the course Blackboard page)
- Instructors Dissection Kit. NascoWest.
- Gloves (nitrile, rather than latex, gloves are recommended)
- Human Anatomy text (recommended text below; others may suffice)

Recommended Texts/Materials

- Marieb, E. N. *et al.* 2012. *Human Anatomy*, 8e. Pearson
- Borror, D. J. 1988. *Dictionary of Word Roots and Combining Forms*. (Available on the course Blackboard page)
- Kreiger, P. A. 2013. *A Visual Analogy Guide to Human Anatomy*, 3e. Morton.
- Sebastiani, A. M. and D. W. Fishbeck. 2005. *Mammalian Anatomy: The Cat*, 2e. Morton.
- Lab coat (or old shirt)

Course Information

Information for the course (syllabus and other relevant material) can be found on Blackboard (blackboard.csustan.edu). Communication regarding the course will be done *via* Blackboard or email; it is your responsibility to check the course Blackboard page and your university email regularly.

If you need to contact me, I recommend that you use email rather than telephone. Include your name and the course number in the subject line along with the subject. Before emailing me, re-read the syllabus to find if your question is answered there.

Exams

Exams are written with the course objectives in mind. The questions will be written in technical and standard English (like the text and lab manual). Because the information in this course cannot be divided into discreet units, exams are cumulative to some extent. Unless otherwise stated, exams

will begin at the beginning of the scheduled class time. Exam scores will be posted on the course Blackboard page after they are graded.

Correct spelling and good penmanship is necessary for effective communication and poor spelling or poor penmanship is a sign of intellectual immaturity and carelessness. Therefore, spelling errors will result in lost points and illegible answers will receive no credit.

Don't put off reviewing for exams; start well before the deadlines approach. It is best to start studying for the first (and final) exam on the first day of class. See the *Course Schedule* for exam dates and *Tips for Success* for suggestions on studying, etc.

Lectures

Lectures are organized with the presumption that you have read the material related to the topic before class (see *Tips for Success*). Slides are used to supplement the lecture and generally illustrate some aspect of human anatomy (and give students something to look at besides me); most the figures will be taken from the recommended text book; because some students may have other texts, the slides will be available on the course Blackboard page. Lecture slides generally are images with few words; you are expected to take notes on what is said rather than merely copying words from the slide. If you feel I am covering the material too fast, feel free to stop me by asking questions about the material.

Lecture Exams (250 points)

There will be three lecture exams (50 points each) and a final exam (100 points). Lecture exams will focus on material covered in lecture. All topics covered are important to understand human anatomy and thus exam questions randomly survey the material presented in lecture. Material from the lectures beginning after the previous exam (or first day of classes) through the material covered on the lecture before the exam will be included on the exam (unless specifically stated otherwise); exam questions may also cover material on previous exams. Half of the questions on the final exam will cover the most recent material; the other half will cover the material covered on previous exams. Exam questions are generally multiple-choice, but may include short answer, short essay, or other forms of questions.

You will need a Scantron form 882E and a #2 pencil for each lecture exam; incorrect forms or incorrectly marked exams will earn no points. No exams will be handed out after the first student has completed the test. You may not leave during exams; take care of necessary business beforehand. Scantron forms will be returned, but the exams will not. You may look over the exam during office hours. You will have weeks after exams have been returned to dispute your scores; after that, no scores will be changed. The lowest of the three lecture exam scores (percentage) will be replaced by the final score (percentage) if the final exam score is higher than the percentage of the lowest lecture exam. A missed exam can also be replaced, but subsequent missed exams will earn zero points.

Labs

Labs are designed to allow students to actively interact with materials that aid in a more complete understanding of anatomy (*e.g.*, microscopic material, models, and dissection materials). The lab manual is written as a guide for you to follow to better understand human anatomy and as such, it is imperative that you carefully read and follow the lab manual. If you do not bring a manual to lab, you may be asked to leave. Supplemental sources (texts, atlases, internet, etc.) maybe useful

outside of lab, but not in lab; do not bring them to lab. Lab seats will be assigned the first day and can only be changed by your instructor.

Lab Practical Exams (200 points)

There will be six lab practical exams; 4 worth 25 points each and 2 worth 50 points each (see Course Schedule). The last practical includes a cumulative portion (about half the exam). The questions will focus on identification and justification for the identification. Anything included in the lab manual (unless specifically omitted) may be included on these exams. As a way of testing your understanding, practical exams may include unknowns (*i.e.*, material that you may not have not seen in lab). A practical exam form will be supplied; you only need bring a pen or pencil (you may also want to bring gloves and a probe).

For the 25 point practical exams, there will be 13 stations (25 stations on the final) with 2 questions at each one; each question will be worth 1 points. For the 50 point practical exams there will be 25 stations (2 questions at each station and each question worth 1 point). You will have 90 seconds to answer the questions at each station. 1 point will be deducted for every two spelling errors, but errors in which another word is spelled correctly will be marked wrong (*e.g.*, humorous instead of humerus). After 90 seconds, you will be instructed to move to the next station in sequence. When you have been to each station, you will have 2 minutes to go back to 2 or 3 stations. Images of each question will be posted on Blackboard. You will have 2 weeks after exams are returned to dispute lab practical exam scores; after that, your exam score will be changed.

Practical exams (except the last one) will be given on Fridays (see Course Schedule). You must sign up for an exam time; the sign-up form will be available on-line. Practical exams will begin at the specified time. Do not be late; once the practical exam starts, you will not be allowed into the room. Lab practical exams are very time-consuming to set up; make-up lab practical exams will not be given. The lowest of the six practical exam scores (percentage) will be replaced by the final practical score (percentage) if the final practical score (percentage) is higher. A missed practical exam can also be replaced, but subsequent missed exams will earn zero points.

Lab Performance (50 points)

Performance during lab is tied to success. Therefore, to entice you to keep this in mind, you are awarded 50 lab performance points at the beginning of the term: 6 points for each of the 7 sections (see schedule) and 8 semester points. These points can be lost by improper use materials or in appropriate behavior (see below). These points are not disputable.

At the beginning of the term and periodically through the remainder of the term, microscopes will be used. Correct use of the microscope is necessary and the lab manual has detailed instructions on its use. To entice you to use microscopes correctly, 6 points can be earned. Microscope misuse will cost points (this includes improper carrying, use, and storage of the microscope). Misuse of microscopes after this section will result in loss of semester points.

Models and replicas are used for many sections to help show anatomical structure. This is especially true for the second section that will include replica skeletons and skulls (and some real skeletal material). As you work with these, you will notice that previous students have marked on them and damaged them in other ways. Up to 6 points are available for not misusing skeletal materials; points will be lost for misuse of skeletal materials. Misuse of models before or after this section will result in loss of semester points.

For much of the term, dissection is the primary means for learning anatomy (supplemented by microscopic examinations and models). Lack of care in dissection will negatively impact your ability to learn and understand anatomy. Dissection will be done by teams of two students each (three is allowed only if there are an odd number of students in the class). To entice teams to work carefully on dissections and to reward those that do, students will earn up to 6 points on each of the third through seventh sections for carefully and correctly dissecting (including following the instructions in the lab manual). In most cases, points will be lost by all team members for incorrect or incomplete dissection.

The 8 semester points are awarded for proper performance and participation in lab throughout the term. These points can be lost if you are: not present, present but not actively participating in the lab, distracting other students who are working in the lab, not properly using the lab manual to guide your work, arriving late or leaving early, not cleaning lab materials properly, taking pictures in lab, not properly storing lab materials, etc. Depending on the action, these may be lost by you or your team. If garbage or dissection materials are disposed of incorrectly, points will be lost by each student in that lab section or everyone in the class.

Attendance

Regular attendance in lecture and lab are vital to your success in this course (see *Tips for Success* below). You are expected to attend regularly, come to class on time, and stay until the end of the lecture or lab period. Attendance may be taken, but will not earn points and absences will not cost points (except as mentioned above). Attendance requires your physical presence as well as your attention and active participation. Students who are physically present, but inattentive or disruptive may be asked to leave. Absences, inattentiveness, lack of participation, etc. will have a direct effect on test scores and may be considered when grades are determined.

Grading

Your grade will be determined by your combined performance in lecture and lab; only letter grades can be earned (CR/NC is not available for this course). The use of +/- grades is at the instructors' discretion. All scores earned during the semester will be posted on the course Blackboard page. At the end of the term, you may access your grade from *my.csustan.edu*. Because of potential privacy issues, scores and/or grades will not be given out *via* e-mail or phone.

Dissection is a necessary component to the lab. Students who do not actively participate in dissection will receive a failing grade (F) for the course regardless of the number of points earned during the semester.

A total of 500 points are available (250 from lecture exams, 200 from lab practical exams, and 50 from lab performance); there will be no other points or assignments available beyond those mentioned herein. Letter grades will be assigned as follows:

A	≥ 425 points (85%)
B	≥ 375 points (75%)
C	≥ 300 points (60%)
D	≥ 250 points (50%)
F	< 250 points (or lack of active participation in dissection)
WU	< 250 points and one or more exam absences

Course Drop and Withdrawal Policy

The policies for this course are the same as the university policies: "...dropping courses after the Enrollment Census Date will not be allowed. After the Enrollment Census Date, students are responsible for completion of the course(s) in which they are enrolled...Withdrawals after the Enrollment Census Date and prior to the last twenty percent of instruction may be assigned only for serious and compelling reasons." 26 April is the Enrollment Census Date.

Lab Safety

Each student must watch the tutorial on the BioLab Safety course on Blackboard and pass the quiz with 100% correct. Failure to do so by 8:00 am Friday, 10 February will result in disenrollment from the course.

Open Lab

The anatomy lab (N224) will generally be available for study/review on Wednesdays and Fridays from 9:00—3:00 except on lab practical days (see Course Schedule). It is highly recommended that you make use of this time. However, inappropriate use of the lab or destruction/loss of lab materials during open lab will result in cancellation of this privilege for the duration of the term for all students (and loss of all semester points by each student in the class).

Recording Policy

The use of audio and/or video recorders or cameras (including cell phone cameras) is not permitted during lecture or lab. An exception is made for students who are registered with Disability Resource Services and approved for this accommodation. If you do not intend to comply with this policy, please disenroll from this class; taking pictures during lab will result in lost performance points (see above).

Students with Disabilities

Students with documented disabilities need to make an appointment with the instructor as soon as possible to discuss course adaptations and/or accommodations. If you have an undocumented disability, contact Student Support Services.

Personal Integrity

Behavior that interferes with the instructor's ability to teach or the ability of students to benefit from instruction will not be tolerated. Such behaviors will be dealt with as severely as university regulations allow. Behavior that is not consistent with the Student Conduct Code—including any form of academic dishonesty—will result in immediate expulsion from the course, a failing grade, and the matter will be referred to the Office of Student Judicial Affairs.

Implied Contract

This syllabus serves as a contract between you and the instructor. Your continued enrollment in this class denotes your understanding of, and agreement with, the material herein. You are expected to print this syllabus, read it carefully, and keep it in your notebook to refer to during the term.

Tips for Success

Students often ask what they should do to be successful in this course, I invariably answer with the following:

- Remember that this is a college course and techniques that worked in high school are unlikely to be as effective.
- Dedicate the necessary time to the course. You should schedule at least 6—9 hours/week outside of class for preview and review of materials.
- Read the relevant material before lecture and lab (see course schedule) so that you are familiar with terms and concepts.
- Attend and actively participate in lecture and lab.
- Take good notes in lecture. Write down the ideas discussed. Don't try to write every word said or just copy the text that may be on the slide. Use abbreviations.
- Take notes using a pen or pencil, not a keyboard.
- Re-write or type (don't just re-copy) your lecture notes in outline format as soon after the lecture as possible. Use your own words. Integrate information from reference sources and lecture. Store your notes in the cloud so you can access them anytime and anywhere.
- When there are topics you don't understand, refer to your resources for clarification and if that doesn't work, mark the section in your notes and ask in class or office hours.
- Review your lecture notes daily starting with the current topic and then, beginning with the very first page and going to the last page. Make corrections or additions as needed to increase clarity or completeness. Write summaries.
- Limit study sessions to no more than 50 minutes; even 10- to 15-minute sessions are useful. Take short breaks between sessions. Switching study topics frequently sessions is also helpful.
- Use the index and glossary in the text or a dictionary if you find words that are unfamiliar; the word roots in the back of the lab manual are also helpful in understanding terms.
- When working in the lab, refer only to the lab manual; use supplements only when you are lost or confused. Students often think that pictures are necessary to accurately dissect and identify structures: this is incorrect. Reading and following instructions gives context and understanding that cannot be gleaned from images.
- Re-read the manual when reviewing outside of lab. When doing so, try to envision the material. If you cannot, use supplemental materials and images to help and then return to the lab manual.
- Review weekly with other students who are also taking the time to study and review.
- Don't waste time making flashcards and highlighting—these are inefficient and ineffective practices.
- Read the resources regarding effective study practices available on the course Blackboard page.

Following these tips will allow you to learn more easily and more efficiently. Effective study habits will also make you more confident about your understanding, which translates into higher exam scores. Of course, choosing to do otherwise has the opposite effect.

In addition to these suggestions, there is a *Tips for Success* file under the *External Links* tab on the course Blackboard page that contains several items worth taking the time to read if you desire to be successful in this courses (and other courses).