

Biology 487: A Survey of Human Dissection

Times: Lab: TNR 258 *T or R 4:00-5:50pm
*~2 hour shift-work within this schedule to-be-discussed in class

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Course Description: (Prereq: BIO 387 with a grade of B+ or better and permission from the instructor.) Additional study of human anatomy by dissecting a cadaver to provide prosected cadaver demonstrations for BIO 387. Complements BIO 387 with an introduction to cadaver dissection and review of human gross anatomy, but dissection is not exhaustive and is not the equivalent of a medical school dissection.

Required Materials: Clinically Oriented Anatomy by Kieth L. Moore *et al.*

Additional Resources: Some documents will be posted on the course website, Desire2Learn (D2L), including an inventory of surgical/dissection instruments, images of cadaver pathology from prior semesters, supplemental videos, etceteras. Beyond these resources, the following supplemental texts may be available in class, or are available for purchase in the campus bookstore. If you are uncertain as to whether or not a supplemental textbook is needed, wait until after we have begun dissection.

An Atlas of Human Anatomy by Frank Netter (any edition, even the coloring book),

Atlas of Anatomy by Anne M. Gilroy *et al.*,

The Color Atlas of Human Anatomy by P. Kopf-Maier,

Lippencott Williams & Wilkens Atlas of Anatomy by P.W. Tank & T.R. Gest,

Course Objectives & Grading Policy: The emphasis of this dissection course is to introduce students to concepts and techniques which cannot be learned by reading textbooks or reviewing additional materials. The majority of the information gained pertains to tactile properties of human structures and dissection technique/experience. Therefore, the course grading scale is largely dependent upon attendance and in-class participation. Here is the point scale for your grade:

A = 12.5 points	A- = 12 points	B+ = 11.5 points	B = 11 points
B- = 10.5 points	C+ = 10 points	C = 9.5 points	F = fewer than 9.5 points

OK, so here's how you earn points. **Each day of dissection will earn you 1 point.** Yes, if you complete a 1 hour shift at one lab and one another hour during the alternate lab time, you will earn 2 points. If you do the math, you'll notice that attending and participating in all classes will be *more than* enough to earn an A! In addition to attendance & in-class participation, you may also earn points as indicated on the next page, but **ONLY to a maximum of 1.5 points!**

Pre-arranged absences for academic, medical, and professional purposes, such as research presentations, medical seminar, or graduate school interviews, **are considered half accepted in place of in-class dissection** (assuming you normally complete 2-hour shift work). That is, a write-up for a pre-arranged absence could earn you as much as 0.5 points. There are other examples of acceptable pre-arranged absences, so it does not hurt to ask if the reason for your planned absence warrants points (the worst I can say is no). To earn your equivalent **0.5 points, I would like a short, 1½-to-2 page summary (double-spaced) of your excursion**, typed and emailed to me within one week of your absence. Part of the purpose of this course is also to serve as an aide to your prerequisite course, BIO 387. Opportunities *may* arise to assist with BIO 387 to earn make-up points. I will keep you posted over the semester as opportunities may become available.

Alternate 0.5 point assignments include lab notebook entries and lab quizzes. No, please don't freak out! Due to the very high demand and enrollment of this course, there may be some "down-time" during your dissection period now and then. It quite simply comes down to how much space there is around each tank and what is to be dissected. If we are assessing organs within the thoracic and abdominal cavities, the space around the tank shortens significantly.

Therefore, an activity which can be conducted in alternating fashion is to maintain a lab notebook with dissection drawings / recordings. Each class I will give some suggestions as to what structures you can sketch out to analyze positional relationships. No, you do not have to be an artist to keep a good lab manual! Cartoons, line schematics, even a hand-written log describing relationships will do. What I am particularly interested in is your notes and interpretations of structural relationships, tensile / textural qualities, your description of how the structure was dissected, and how you found the structures compared relative to an available atlas. If you feel that a particular entry is well-written, detailed, clearly labelled, etceteras, **I will consider a lab manual entry for 0.5 points.** You can always ask for me to look over an entry to see if you have sufficient detail for the points before submitting.

Along with suggestions of structures to draw, I will also have a 10-item quiz to draw for brave individuals. I will NOT take away points for incorrect answers! **If you take the 10-item quiz, and correctly identify all 10 structures** (you will be allowed 3 "life-lines"), **you will earn 0.5 points.** However, I might not be able to accommodate all quiz requests on a given day. In other words, if everyone is short points and wants to take the quiz on the last day of class, most students will be out of luck! (Dice are in the lab for settling priority disputes.)

Preparing for Lab Sessions: Dissection of the human body is greasy, messy, and dirty. **You should wear clothes that you do not need to worry about staining.** Tie back long hair, and do not wear dangling or loose sleeves. You can wear a lab coat and keep it in the lab during the semester, but they may not always prevent stains to your clothes. Do not wear shorts or skirts that end above the knee, unless you also have a lab coat which will go past your knees. **You MUST wear closed toe shoes!** They should also be sturdy shoes...ask yourself, if I drop a scalpel, will it be stopped by my shoe? Nitrile or latex lab gloves will be provided for you. The cadaver is not considered especially hazardous at this stage, therefore safety glasses or goggles are recommended, but not required. Disposable splash, face shields will be available. Splash retardant (but not splash resistant) gowns may also be provided. Days in which the bone saw is in use will minimally require the use of a surgical mask (again, to be provided in class).

Tentative List of Dissection Activities: I do mean tentative; it depends upon what we find in our donors.

Willed Materials & Other

Tool recognition / instrument techniques
Bone identification
X-ray analysis
Landmark comparison
Pulse identification (Doppler)
Suturing demonstration

"Newer" Donor (undissected)

Superficial landmark identification
Skin removal
Superficial vein identification
Thoraco-abdominal cavity exposure; identify major serosal layers & sacs
Brain removal
Removing deep fascia to identify major muscle groups of interest (half-way point for this donor)
Circle of Willis separation

"Older" Donor (partially-dissected)

Project specific muscle groups of interest
Identify major deep arteries, veins, and nerves of the limbs
Open knee, ankle, and elbow joints
Remove arm at surgical neck
Pelvis bisection (non-sagittal) & lower limb removal
Head & neck dissection w/temporo-mandibular opening
Head & neck bisection; pharynx & other cavity dissection
Heart dissection (w/chamber opening)
Lung removal w/bronchial tree dissection
Abdominal aorta & associated viscera removal (liver separated)
Posterior thoracic & abdominal wall dissection
Kidney bisection
Reproductive structure identification
Orbital dissection (w/lens removal)
Laminectomy
Brain sectioning

Special Accommodations:

In compliance with the Americans with Disabilities Act (ADA), I will make every effort to honor requests for reasonable accommodations made by individuals with disabilities. If you have a disability and require accommodations, please register with the Disability and Assistive Technology Center (6th floor Albertson Hall) and let me know as soon as possible. Requests for accommodation can be responded to most effectively if I receive the requests early in the semester. Such requests are confidential. More information about the ADA at UWSP can be found here: <https://www.uwsp.edu/hr/Pages/Affirmative%20Action/ADA.aspx>.

UWSP Community Bill of Rights and Responsibilities:

UWSP values a safe, honest, respectful and inviting learning environment. A set of expectations for students and instructors, known as the Rights and Responsibilities document, is intended to help establish a positive living and learning environment. This document is both available through the Dean of students' webpage, or: https://www.uwsp.edu/dos/Documents/2015_Aug_Community%20Rights%20and%20Responsibilities%20Web.pdf.

Academic Policy:

The Rights and Responsibilities document also includes the policies regarding academic misconduct, which again can be found at the link in the previous paragraph. A summary of this information is also provided at the Dean of students' webpage, or here: <https://www.uwsp.edu/dos/Documents/AcademicIntegrityBrochure.pdf>. The ***minimum penalty*** for violating this policy is a recorded zero for the assignment in question.

In this class, academic misconduct would entail misrepresentation of absences, disrespect of the willed materials in class, or other ill misconduct directed toward other students and the instructor. Penalties will be discussed on a case-by-case basis, as most class periods do not involve individual assignments. Please remember that specific topics in this class are of a sensitive nature. Be conscientious of what you say and be respectful of each other. I want to maintain a comfortable learning environment and also prepare you for appropriate conduct in your future health professions. As a final note, please be aware that capturing images of the materials in this class is not permitted, and redistributing images provided for academic use on the course website is prohibited.