Biology 487: A Survey in Human Dissection

Times: Lab: CBB 320 / 320A R @ 3:30-5:20 p.m. *Exam = W 5/15 @ 2:45 p.m.

Labs will not be held on dates when BIO 387 holds exams (5th or 6th and 10th or 11th week).

Instructor: Lindsay R. Dresang, Ph.D.

Office: CBB 313

Office hours: M @ 11:00 p.m. & F @ 2:00 p.m., or by appointment (can meet in the lab)

E-mail: LDresang@uwsp.edu

Phone: 715-346-2627

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: Atlas of Clinical Gross Anatomy by Moses, Banks, Nava, & Petersen, 2nd Ed.

Additional Resources: Some documents will be posted on the course website, 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: 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 techniques/experiences. Of course, you will still receive additional instruction utilizing available texts and other resources. Specifically, you will:

- 1) Appreciate the information obtained through tactile interaction with cadaveric materials,
- 2) Differentiate between the tensile properties of different anatomical structures,
- 3) Recognize anatomical structures in greater detail, including identification of pathologies on X-rays, handedness on real bone, and clinical signs associated with our donor,
- 4) Problem-solve in specific learning activities during structure comparisons, and
- 5) Develop team-working skills.

487 *Grading Policy:* 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 $A_{-} = 12 \text{ points}$ $B_{+} = 11.5 \text{ points}$ 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.** However, if you are only here for half the dissection period, then you only earn 0.5 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!

So what's the catch...

There will be in-class activities called "WORKSHEETS." With these worksheets you will be asked to identify a set of structures or instruments or other features which were recently discussed. You may have the opportunity to work on them in groups on occassion. If you do not get the correct answer, you will have the

opportunity to try again to earn the full worksheet credit. **Failure to attempt a worksheet will result in a 0.5 point loss.** If you miss class on the day a worksheet is administered, but for good reason, you may be able to reattempt the activity. Alternatively, you can see the alternate assignments below.

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, with its relevance,** 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. 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. A good rule of thumb is that you should clearly outline at least 5 specific examples of what you learned about using cadaveric materials / X-rays / etc., and how this learning experience would compare had you solely used anatomical textbook references and models / pictures.

A last optional lab assignment may involve a scheduled examination. This activity will better prepare you for graduate-level coursework. The final exam period may be used for such an activity, or the labs which align with the BIO 387 exam dates. **Optional exams are worth 1 point.** Otherwise, there are no required exams (hence the asterisk at the top of the previous page by your final exam period).

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. Splash retardant (but not splash resistant) gowns will be provided. 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 does not pose a biohazard risk, nor is there a substantial risk of formaldehyde or other chemical exposure at this stage (except ethanol). Nevertheless, you MUST wear gloves! Disposable face shields with neck sashes are preferred (and provided), but safety glasses or goggles will be acceptable (not provided). On specific dates, however, use of splash shields will be enforced, possibly along with surgical masks (also provided).

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.

In addition to these standard words on rights and responsibilities, it is prudent to formally discuss class conduct. Specific topics in this class are of a sensitive nature. Please 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 (certain conduct could get you kicked out of a graduate program, for instance). Most of the materials made available in this class have been willed to the university / donated and subsequently obtained through the UW-Madison donor program and should be treated with respect. Inappropriate conduct in this class will get you kicked out without re-entry until appropriate conduct is sincerely assured and provided in writing (the length of such writings will be dependent upon the extent of misconduct). PLEASE, DO NOT TEST ME ON THIS POLICY.

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.