

# Cadaver Dissection – BIOH 457-80

## Course Syllabus and Policies

**Instructor:** Heather Labbe, M.S.

**Office:** ISB 103A

**Phone:** 243-5436 or 243-6834

**Email:** [heather.labbe@mso.umt.edu](mailto:heather.labbe@mso.umt.edu)

**Office Hours:** Tuesdays 9-11am (or by appointment)

This course is a practicum that provides the participant the ability to expand their anatomical knowledge base, professional growth, and public speaking skills. The participant will have the unique opportunity to dissect, within a small group, a region of a cadaver and present visible structures to their peers.

At least one year of upper division anatomy coursework with a cadaver lab is required. Completion of BIOH 456 with a letter grade of "A" is prerequisite. Consent of the instructor is required to enroll.

### Requirements:

1. Prepare a "dissection strategy" to be presented as a group to the course instructor, using available resources.
2. Accurately log each session's progress to the course Moodle page.
3. Maintain open communication with the course instructor regarding any issues that may make themselves evident during dissection sessions.
4. Prepare a prosection suitable for use as a teaching resource for the departmental anatomical and physiological course offerings.
5. Present the finished prosection to the course instructor by the due date listed in the syllabus.
6. Present the finished prosection to the undergraduate teaching staff, lab instructors, and BIOH 370 course instructor by the due date listed in the syllabus.
7. Monitor the Moodle course website for important announcements.
8. Complete self and group evaluations at the end of the semester.

### Learning Goals:

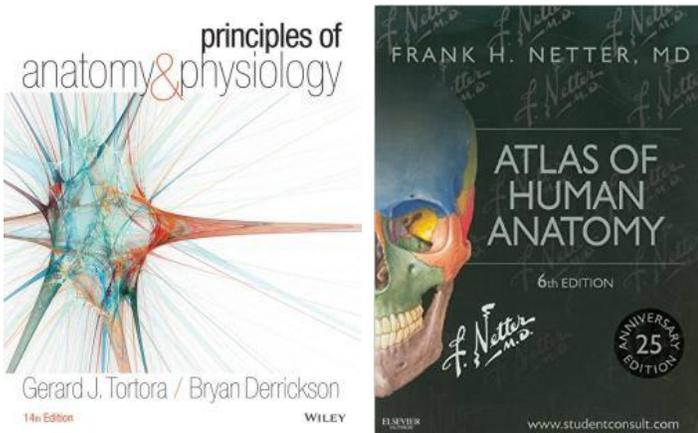
- Experience a three dimensional, detailed exploration of the human body unavailable to any other undergraduate student in the state of Montana.
- Prepare and execute a dissection strategy that allows the student to become expert in the anatomy of a region of the human body from a multi-systems perspective.
- Become well versed in appropriate dissection techniques and procedures.
- Develop increased public speaking, time management, critical thinking, and interpersonal skills.

### Learning Outcomes:

- Students will develop proficiency using dissection tools, terminology, and different techniques in order to appropriately visualize structures.
- Students beginning dissection should be able to identify surface anatomical landmarks and describe in detail the underlying gross anatomical structures.
- Students will demonstrate proficient knowledge of bony skeletal landmarks.

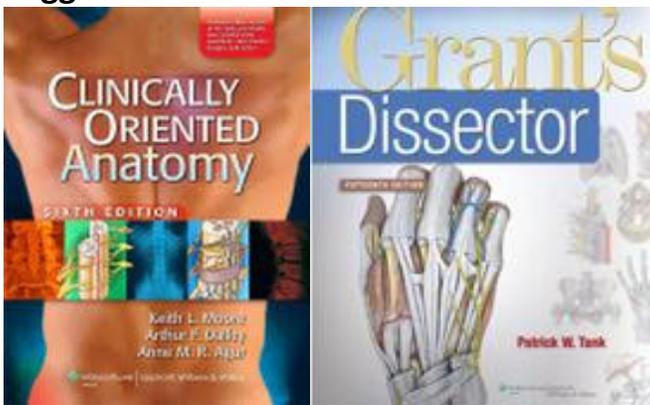
- Identify and describe the major gross and microscopic anatomical components of the endocrine system and describe the functions of selected hormones.
- Identify and describe the major gross and microscopic anatomical components of the cardiovascular system.
- Correctly describe the tissues supplied/drained by selected vascular structures in the dissection region.
- Identify and describe the major gross and microscopic anatomical components of the lymphatic system.
- Identify and describe the major gross and microscopic anatomical components of the digestive system.
- Identify and describe the major gross and microscopic anatomical components of the renal system.
- Identify and describe the major gross and microscopic anatomical components of the male and female reproductive systems.
- Students will accurately present completed dissections to their peers and the course instructor, demonstrating knowledge of each system presented in their assigned region.
- Students will work within their dissection groups to prepare and submit a “Cadaver Autopsy Report” which will attempt to recognize and describe any apparent pathologies and surmise cause of death.

### Required Texts:



- Principles of Anatomy and Physiology by Gerard J. Tortora, Bryan H. Derrickson - John Wiley & Sons
- Atlas of Human Anatomy: with Student Consult Access, 6e By Frank H. Netter Saunders/Elsevier

### Suggested Texts:



- Grant's Dissector, any edition
- Clinically Oriented Anatomy By Keith L. Moore, Arthur F. Dalley, Anne M.R. Agur - Lippincott Williams & Wilkins

## Use of Cadavers

### Respect for the Cadavers:

These donated cadavers are individuals and must be treated with the dignity and respect they deserve. It is inappropriate to make disrespectful comments within and outside of the laboratory. You will observe professional conduct while in the lab and outside the lab. Naming of the cadavers, unnecessary horseplay, posing of the cadavers, etc. WILL NOT BE TOLERATED. These cadavers are the result of gifts from fellow Montanans and their families who believed strongly in the benefit of health science education. For more information, please see the [Montana Body Donation webpage](http://www.montana.edu/wwwwami/bodydonate.html). <http://www.montana.edu/wwwwami/bodydonate.html>

### Rules for Cadaver Use in the Anatomy and Physiology Labs:

- The cadavers used in this lab were obtained from the Montana Body Donation Program at Montana State University. Cadavers are donated to MSU according to state regulations. Persons donating their body receive no financial compensation; this is truly their ultimate gift. Hence it is imperative that proper respect be paid to the cadaver at all times.
- Only students enrolled BIOH 370, BIOH 113 and teaching staff are allowed into the cadaver lab at any time. No minor children or other family members are to be brought to the open lab times. If you see someone in the lab who you believe is unauthorized, notify laboratory personnel and/or ask him/her to leave the lab.
- Body parts, tissue, etc. must not be removed from the lab.
- No cameras, camera phones or electronics with photo or video capability are allowed in the lab. Photography is prohibited.
- Please be careful, the cadaver dissections will be used and material reviewed in other lab sections by other students. Keep the dissections moist and well covered when not working on that portion of the cadaver. Keep doors to lab closed and locked to keep security intact; students should maintain a clean and safe workspace in the lab.

### Laboratory Safety in the Anatomy and Physiology Labs

- In case of an emergency, dial extension 4000 to report serious injuries. Phones are located throughout the Health Sciences Building. The Health Sciences main office is in room 104.
- First Aid supplies are available in the supply room for HS 101 (the anatomy lab), HS 104 (the main office) and HS 403.
- You are required to wear disposable gloves (nitrile or neoprene, latex gloves are not acceptable) at all times while working with the cadaver dissections. Cadavers are embalmed with a fluid containing propylene glycol, ethyl alcohol, phenol and formaldehyde. Physical contact of your skin and clothing should be avoided.
- Wear old clothes and a long-sleeved lab coat while working with the cadaver. Lab coats should not be worn outside the lab.
- No open-toes shoes or sandals are allowed in the lab. Wear shoes that cover your entire foot.
- Contact lens wearers should be aware that chemical fumes can pass into gas permeable and soft lenses. These fumes irritate the eyes. Protective glasses (prescription or safety glasses) are recommended to protect against chemical splashes. Know the location of the eyewash station before you begin.
- If you are pregnant, or believe you may be pregnant, you may NOT participate in the dissections until Heather Labbe is supplied with written documentation from your obstetrician that verifies an understanding of the chemicals to which you and your fetus are being exposed while in the presence of

the cadavers. You must also sign a waiver indemnifying the University and its employees from any liability for damages or injury resulting from exposure to said chemicals.

- No foods, drinks, gum or the application of makeup are allowed in the lab.
- Respirators can be purchased for use in the lab, if desired. Pregnant females may not attend dissections unless a properly fitted respirator is worn.
- Wash hands prior to leaving the lab.

Your ability to participate in this course results from a selfless donation of thoughtful individuals who voluntarily chose to donate their body to the Montana Body Donation Program that supports WWAMI education programs. WWAMI (Washington, Wyoming, Alaska, Montana and Idaho) is a cooperative regional medical education program of the University of Washington, School of Medicine that provides places for twenty Montana students per year in its entering medical student class. These twenty students take their first year of medical school at Montana State University and complete their studies at the University of Washington in Seattle and at community clinical training sites throughout the Northwest.

**Evaluation Criteria:** The course grade will be based on 150 possible points.

- Dissection Strategy Presentations:
  - Student dissections groups will review anatomical structures pertinent to their region, meet with the course instructor to review resources, and develop a dissection “strategy” for their region.
  - Dissection strategies will be submitted in written form prior to an oral presentation. Students should be certain to use appropriate anatomical and directional terms. (5 points)
  - The entire dissection group will present their strategy to the instructor as an oral presentation which will be graded on based upon evidence of adequate preparation, responses to inquiries regarding anatomical structure, and the professionalism of the presentation. (15 points)
- Dissection Presentations:
  - Each student in each dissection group will present the group’s dissection to the course instructor prior to the deadline included in the course syllabus. The dissections must be totally complete by the assigned deadlines. (20 points)
  - Students will present anatomical structures, to include the following:
    - Surface anatomical landmarks.
    - Muscle identification to include bony attachment sites.
    - Nerve identification to include muscle innervations.
  - Presentation grades will be based upon evidence of careful and thorough dissection, responses to instructor inquiries regarding anatomical structure and physiological concepts, and the accuracy and professionalism of the presentation.(30 points)
- Dissection Logs – Each dissection group will summarize their progress after each dissection activity and post the summary to a discussion forum on the course online resource. (15 points)
- Cadaver Autopsy Report - Each student will turn in an original written Cadaver Autopsy Report based on observations made on the cadaver and the anatomic pathology notes taken by the dissection group.
  - As students perform their dissections, they will take notes regarding abnormal or pathological conditions and include their findings in their discussion forum posts to the course online resource.

- At the end of the course, each student will compose a written Cadaver Autopsy Report that summarizes all pathological findings (and interpretations) from the cadaver.
- In addition, each student will provide a suspected cause of death (based on observations) for each cadaver in a written report. (30 points)
  
- Lab Cleanliness - Appropriate safety and hygiene protocol will be observed at all times. Dissection groups will be responsible for regularly scheduled lab cleaning and for the cleanliness and proper storage of all dissection tools. (5 points)
- Self/Group Evaluations – each group member will evaluate their peers and themselves at the end of the semester out of a total of 30 points. Scores will be averaged across submissions for each individual. (30 points)
  
- Failure to meet any dissection presentation deadlines will result in a drop of one letter grade for each occurrence.
- Unexcused absences from dissection sessions and/or presentations will result in a drop of one letter grade for each occurrence.
- Failure to document dissection progress will result in a deduction of half a letter grade for the dissection group for each occurrence.
- Students that are co-enrolled as teaching assistants will be expected to present their dissection to the BIOH 370 teaching staff.