Course Director
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Office Hours: 7:00-9:00 am Tues-Wed-Thurs

ENROLLMENT REQUIRES SPECIAL PERMISSION BY INSTRUCTOR. Students must be enrolled in a life science Ph.D. program or in the Anatomy & Cell Biology MS program. Students must discuss the rigors of this 8-credit course with their dissertation advisor as part of the approval process. Be aware that this course will take considerable time away from the student’s research progress during a 16-week period from August into November.

ENROLLMENT CAP: 6 students

FALL SEMESTER-ONLY. This course is taught in conjunction with the Medical Gross Anatomy (MD1 5000) course taken by Yr-1 medical students. Graduate students enrolled in ANA 7010 must be ready to start on the Monday of the first week of August. The University calendar is not followed other than for registration (fall) and final grade assignment (end of Dec).

Overview
Human Gross Anatomy (ANA 7010) is an 8-credit course for graduate students who want to learn the macroscopic anatomy of the human body as applied to their research interests or to pursue a career in medical education. A full-cadaver dissection experience is the centerpiece of the course that encompasses 96-hours of student-faculty interaction. This experience is supplemented by 56-hours of lectures on gross anatomy topics. The course is taught using a regional approach, which is the preferred method of instruction when cadaver dissection is the central teaching & learning tool. This strategy divides the body into regional units: Unit I: Upper Limb & Back; Unit II: Head & Neck; Unit III: Thorax & Abdomen; and Unit IV: Pelvis & Lower Limb (described below).

Course Goals
The primary course goal is to enable the medical student to acquire knowledge of the normal structure and organization of the human body. This fundamental knowledge provides the basis for understanding normal body functions. A secondary goal is to build a foundation of skills that enable the student to recognize and appreciate normal human variation, as well as to detect abnormal structures that may be related to disease processes.

Learning Objectives Common to all Lectures and Laboratory Dissections
1. Describe the normal anatomy of the region under study.
2. Relate the anatomy of each structure to its basic function(s).
3. Apply knowledge of anatomy to evaluate clinically relevant problems.

Exam questions are mapped to these 3 learning objectives for all lectures.
Human Gross Anatomy (ANA 7010)
Course Syllabus

Course Description by Regional Unit

Unit I: Upper Limb & Back
The student will acquire knowledge of the anatomy and function of the upper limb and back, including the structural contents and anatomical relations of the anterior thoracic wall, axilla, arm, forearm, wrist, hand, and back. The structural components and movements of upper limb joints are covered. The student is specifically instructed on the anatomical basis of the diagnosis of upper limb nerve lesions, and introduced to patients with representative lesions. The laboratory experience allows the acquisition of dissection skills in a relatively uncomplicated region of the body as a basis for complexities encountered in other regions.

Unit II: Head & Neck
The student will acquire knowledge of the anatomy & function of the structures of the neck, face/parotid region, infratemporal fossa, skull, scalp and cranial cavity, pterygopalatine fossa, nasal cavity, pharynx, larynx, eye, orbit, and ear. The student is also expected to achieve familiarity with the distribution and functional components of the cranial nerves, as a basis to gain an understanding of their peripheral distribution as followed in later dissections of other body regions. The distribution and components of the autonomic nervous system of the head and neck are also covered.

Unit III: Thorax & Abdomen
The presentation of these two regions as an integrated unit follows their morphologically natural relationship. The acquisition of an intimate knowledge of the anatomical organization of these regions forms the basis for the later acquisition of skills in physical diagnosis, and is essential to the correct interpretation of current technological biomedical visualizations of these regions. The lymphatic drainage of these regions is presented, and emphasis placed on the distribution of the autonomic nervous system components. A systematic anatomical approach is employed for the lectures and dissections of the thoracic cavity, pleura, lungs, mediastinum, and heart. The student is expected to gain a three-dimensional knowledge of the anterior abdominal wall and inguinal structures, and of the structural features, and anatomical relations of the stomach, small and large intestines, spleen, liver, pancreas, kidneys, and suprarenal glands.

Unit IV: Pelvis & Lower Limb
The integration in the presentation of these regions is necessitated by the vascular and nervous components, which functionally link them. The student is expected to gain a basic knowledge of the interrelation of these regions to facilitate the student’s future understanding of the potential postoperative complications involving defecation, urination, parturition, the sexual functions of pelvic organs, and of functional deficits in the biomechanical movements of the lower limbs. The sequence of study and dissections consists of the anatomy of the male and female perineum and external genital organs, pelvic genital organs, urinary bladder, rectum, and anal canal. Special attention is given to the blood supply, innervation, and lymphatic drainage of the region. The format in the presentations of the lower limb is similar to the upper limb. Appropriate emphasis is employed in the study of the lower limb joints, particularly the hip and knee joints, as these represent such frequent deficits in the biomechanics of lower limb movement. The student is expected to acquire knowledge of the anatomical contents and organization of the gluteal region, thigh, popliteal fossa, knee, leg, ankle, and foot.
The specifics of topics learned in gross anatomy:

1. Correctly use anatomical terminology.
2. Describe the bones and their major components.
3. List attachments, actions, and innervation of the muscles.
4. Describe the formation and distribution of the nerves and nerve plexuses and the role of the nerves in selected reflexes.
5. Describe the spinal cord, spinal nerves, cranial nerves and the coverings of the brain and spinal cord.
6. Describe the formation and distribution of the blood vessels, as well as key anastomoses between vessels.
7. Summarize the flow of lymphatic fluid, including nodes and major vessels, and drainage of organs.
8. Describe the various fossae, spaces, compartments, and transitional zones, including their boundaries and contents.
9. Describe the components of the major joints.
10. Describe the organs and glands including location, surfaces, borders, blood supply, lymph drainage, innervation, and connective tissue coverings.
11. Describe the components and functions of the autonomic nervous system, and their role in selected reflexes.
12. Discuss visceral sensory innervation and referred pain.
13. Identify the components and derivations of fascial layers.
14. Describe the process of respiration.
15. Describe the serous membranes of the body cavities, including mesenteries, membranes, and ligaments.
16. Describe the borders and contents of the body cavities and list which structures are peritoneal.
17. Relate embryological development to adult anatomy for selected structures.
18. Describe the gait cycle, the role of muscles of the lower limb in normal gait, and common gait deviations and their causes.
19. Discuss the relationships of the anatomic structure studied.
20. Predict the effects of damage to nerves or other selected anatomic structures.
21. Describe selected clinical conditions.
22. Apply knowledge of anatomic structures to analyze clinical case scenarios.
Course Format and Attendance Policy

1. **Lectures in Gross Anatomy:** Lectures are designed to facilitate the student's own ability to integrate and learn the complete anatomy of the human body, especially as related to the cadaver dissection experience. All lectures are recorded and made available for additional review on Blackboard. **Attendance is required.**

2. **Laboratory Dissection:** A complete cadaver dissection experience is provided under direction of experienced gross anatomy faculty. Clinical relevancy of dissected structures is stressed. Upper-level medical and graduate students may be present to provide teaching assistance. Clinical faculty are present at selected times to relate the anatomy to their specialty areas. **Attendance is required.**

Exams

There are 4 Unit exams- each contains a Written Exam and a Lab Practical exam. Each unit exam tests material specific to the unit. There is no cumulative final exam.

- **Unit Written Exams:** Each exam contains 50 multiple-choice questions worth 1-pt each. Each question has ONE best answer. Questions will focus on a single anatomical topic or integrate material across several topics discussed during the unit. Many questions use clinical scenarios. Radiological images, cross sections, or drawings may also be used on these exams. The course pack & dissection guide are the primary sources of the questions.

- **Unit Lab Practical Exams:** Each exam contains 100 multiple-choice questions (0.5-pt each question). Exams are taken in the gross anatomy laboratories. Each question has ONE best answer. Structures will be tagged on cadavers, prosections, radiologic images, cross sections or bones. Students may be asked to identify a tagged structure or answer a thought-type question about the tagged structure. The course pack & dissection guide are the primary sources of the questions.

Grade Policy

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Students should be aware that a final grade of B-minus or below earned in a graduate course is grounds for dismissal from some programs. Alternatively, a grade that brings the student’s total GPA below 3.0 is also grounds for dismissal. Students should consult the WSU Graduate Bulletin as well as discuss academic dismissal policies with their respective Program Directors before enrolling in this course.
Gross Anatomy Facilities: all located in the basement (ground floor) of Scott Hall

Laboratories Rooms 310, 320, 330, 340
Prosection Room 115 Scott (contains refrigeration units for pro-section storage)
Study Room 107 Scott (contains cross section and radiological images)
Classroom 117 Scott (not used for Yr-1 gross anatomy)
Body Bequest Office 525 Scott (mortuary staff who run the gross anatomy facilities)

Study Resources for Success in Gross Anatomy

1. Your Cadaver
   The laboratory dissection portion of the course is the main contributor to student success in gross anatomy. A complete description of the laboratory dissection experience, including the student Code of Conduct, is found in the next section of the course pack.

2. The Course Pack
   The course pack contains a complete set of faculty-authored notes on each anatomical topic that students are expected to master for the exams. Topics are explained in lectures that students can attend ‘live’ or ‘stream’ at their option. Information in the course pack is the final authoritative source for the unit exams.

3. Texts

   Dissection Guide: **Required.**

   Atlas: **Recommended.**

   Textbook: **Recommended.**
   - **Gray’s Anatomy,** 41st Ed (2016) Standring (Elsevier).

The Shiffman Medical Library subscribes to **Clinical Key**, which provides electronic access to materials published by Elsevier. Go to [https://library.wayne.edu/shiffman/](https://library.wayne.edu/shiffman/) and click on Clinical Key (under Quick Links). Search the name of the text published by Elsevier.
4. Blackboard

Log-In with university access number and password. The WSU Blackboard site contains all documents of the course in electronic format, plus other course materials that students find useful:

- **Streaming site**: gross anatomy lectures including clinical correlation and radiology lectures listed by title, faculty name, and date of recording.
- **Lecture Notes & Slides**: the course pack and the complete series of lecture slides—powerpoint pics shown in lecture & saved as pdf organized in folders by faculty name.
- **Course Resources Folder**: skull anatomy, cross sections, radiology images, muscles, temporal bone & ear, prosections, and practice quizzes.
- **Supplemental Resources Folder**: contains links to optional resources such as Acland Dissection Videos, Net Anatomy, and Anatomy TV.

5. Additional Self-Study Materials

- Bones (located in the drawer of your cadaver table)
- Prosections (115 Scott)
- Cross sections and radiological images (Blackboard and 107 Scott)

6. How to Obtain Help

- **Do you have a question about something in the course pack?** Email specific questions to the faculty member who authored the notes. If no response, email course director.

- **Do you have too many questions that cannot be solved by email?** Email the faculty member who authored the notes to set up an office visit. If no response, email the course director.

- **Unit Reviews**: One review per unit conducted by the faculty. These are not on the regular schedule. Dates/times will be announced.
## Gross Anatomy Faculty Contact Information

<table>
<thead>
<tr>
<th>Faculty</th>
<th>Email</th>
<th>Office</th>
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The Importance of Cadaver Dissection

Knowledge of the structure of the human body is fundamental to any life science discipline. At the conclusion of this course you will have dissected the entire human body and have a complete understanding of its structure. You will also obtain a solid foundation on which to build a greater understanding of functional anatomy. Cadaver dissection is much more than a teaching tool of anatomical facts and concepts. The student’s independent dissection of the cadaver is a discovery process that engages all parts of the student’s brain– not just the parts that help memorize facts or choose correct answers on multiple-choice exams.

It is through dissecting the human body that one comes to understand its structure and 3-dimensional relationships, as well as the diversity of human variation. Dissection provides the opportunity to explore anatomical concepts that are not necessarily described in textbooks or atlases. Structural variations encountered during dissection may point to disease processes or help the student develop a greater appreciation of human individuality. Cadaver dissection also teaches the value of active observation- the habit of looking with an inquiring mind. While attempting the identification of an anatomical structure or relationship, you will marshal the facts you know to eliminate possibilities and confirm predictions. You will learn to the language of anatomy and will become able to communicate anatomical knowledge correctly and effectively. You are fortunate to have the opportunity to participate in full cadaver dissection. Resolve to experience it as a great adventure and take pride in the privilege of participating in this time-honored tradition.

Code of Conduct

The Uniform Anatomical Gift Law of the State of Michigan permits the dissection of the human body. The Body Bequest Program of Wayne State University provides the bodies for your education, prior to their final interment.

The Code of Conduct will apply at all times in the Gross Anatomy Laboratories:

1. Dissection of the human body shall be performed with dignity and respect.
2. Students assigned to a cadaver will be responsible for the proper conduct of the dissection according to the dissection guide and faculty instruction.
3. All identifying information about the cadaver is confidential.
4. Students may not dissect or alter cadavers assigned to other students.
5. Human tissues, including prossections, bones and skeletons, may not be removed from the laboratories.
6. Neither the cadaver nor any part thereof may be photographed or video-recorded by the students.
7. Neither the cadaver nor any parts thereof are to be positioned or displayed in an inappropriate, comical or obscene manner.
Laboratory Rules

1. Students must abide by the “Code of Conduct in Gross Anatomy Laboratory” at all times.
2. No eating or drinking is allowed. There is no smoking allowed anywhere on campus.
3. **NO VISITORS ALLOWED.** Only medical students, faculty, and mortuary staff are permitted in the laboratory. Friends or family members are strictly prohibited from the laboratory.
4. No playing of radios or other electronic devices in the laboratory.
5. All cadaver materials (including prosections) are to be kept moist and wrapped after use.
6. Wear appropriate clothing (including your name tag) and behave professionally at all times.
7. Students must keep the laboratories clean and orderly. Pick up and sweep around your table at the end of each dissection.

Policies on Attendance & Participation

**Attendance in Gross Anatomy Laboratory is Mandatory!** Contact the course director ahead of time if you are going to miss a scheduled lab. Excused absences for illness will require a physician note. Excused absence for any other reason will require permission of student advisor and course director.

**Dissection is a Privilege and Participation is Mandatory!** Every student is required to dissect. Anyone not attending laboratory and/or not dissecting will be called to account.

Preparing for First Day of Dissection

Reserve a locker by placing a lock on the locker of your choice. Women’s lockers are located in Rooms 118, 331 and 344. Men’s lockers are in Room 114.

Obtain lab supplies: You will need the required Grant’s Dissection Guide, Netter Atlas, disposable gloves, dissecting kit, and a lab coat. Lab apparel is optional: it can be scrubs or regular clothing. Mask and goggles are not necessary but are permissible. Hypo-allergenic gloves can be purchased if you have a latex allergy. Once you change into lab attire, you should remain in the basement – lab attire is not appropriate in any other part of Scott Hall.

Familiarize yourself with the Laboratory: Inspect the gross anatomy laboratory and adjacent areas. Immediately outside the main laboratory entrance, note the Gross Anatomy Bulletin Board. Important course information, updates and policies are posted on the Board as well as electronically on Blackboard or by email to the class listserv. Note that each laboratory has x-ray view boxes, sinks, soap dispensers, paper towel dispensers, and first aid kits. One or more central tables are for display of prosections, special tools, degreasing agents, watering bottles, and sharps disposal containers. All used scalpel blades (sharps) are placed in the sharps containers for disposal. Do not place them in the regular trash. Note the waste containers. Red bins are for trash (e.g. paper towels, gloves) and yellow bins are for tissues from the cadaver (e.g. skin, fat). Do not mix them. Electrical outlets are
suspended from the ceiling: use a hook to pull them down - **DO NOT** stand on chairs or tables to reach them.

**Explore the contents of your table:** A representative assortment of bones for study will be found in the drawer of your table. Bones may not be removed from the laboratory. One or more skeletons will be available in each laboratory. Each drawer should contain an electric Striker saw, handsaw, bone cutters, chisel, and mallet. There should also be disposable face shields for use at certain times during the dissection process.

**Your Cadaver**

The age and cause of death of your donor is posted on the door of each laboratory. Always be cognizant of the fact that your cadaver is the body of someone’s loved one: treat the cadaver as you would wish your own body, or that of a member of your family, to be treated. The privilege of dissection is made possible by the generosity of donors and their families. It is their intent that you make full use of the opportunity to learn from their gift. Fulfill their expectations and honor their wishes by dissecting with purpose and respect.

**The Body Bequest Program**

All bodies utilized in our anatomy program are donated. A brochure providing information on the Body Bequest Program is posted in each laboratory. At the end of the course, each donor’s body is cremated and their ashes placed in a canister. Depending on the wishes of the family, the ashes are returned to the family or interred at the WSU-SOM burial site during the annual Memorial Service.

**Memorial Service for Donors and Families**

You will have an opportunity to express your gratitude to the donors and their families for their contribution to your medical education at the annual memorial service and interment of ashes. The service takes place in early May and is a fitting close to your first year of medical school. You will receive email notification of the time/date/location of the service.

**The Embalming Process**

Bodies prepared for dissection are not given the cosmetic treatments typical of those prepared for viewing at funerals. Upon receipt, donor’s body is given an identification number (do not remove the numbered tag). The body is bathed and the head shaved. The right carotid artery is exposed and an injection tube is inserted. The entire body is perfused via the vasculature with embalming fluid. Ten to 15 gallons of fluid is injected under pressure. This results in the body appearing somewhat distended; erectile tissues may fill and the scrotum typically becomes ballooned. A hole is placed in the calvaria to open the superior sagittal sinus to improve perfusion of the brain.

**Health & Safety Concerns**

There is no extraordinary health risk associated with dissection of embalmed cadavers. Bodies of individuals known to have had serious infectious diseases such as tuberculosis, hepatitis, AIDS, etc. are not accepted. The concentrated embalming fluid used contains
formaldehyde and phenol and is toxic to bacteria, viral pathogens and most fungus. In addition, bodies are cured for at least three months prior to use. Should you sustain a laceration or puncture wound in gross laboratory, simply treat it as you would any other cut. Wash out the wound, encourage bleeding, apply antiseptic and a band-aid. If it is more serious, consult an instructor. First Aid kits are on the wall opposite the doors of each laboratory. Formaldehyde levels encountered in the gross anatomy laboratory are below levels deemed by the EPA to pose a health hazard. Levels have been monitored in previous years and are well within acceptable ranges. If you have respiratory problems, special masks are available. Some students have reported that wearing soft contact lenses in lab may result in eye irritation. If you are pregnant or think you might be, you should advise the course director and consult your obstetrician. At the time of this writing, there are no known health risks to pregnant women or the embryo/fetus from exposure to formaldehyde or other components of embalming fluid at the concentrations encountered during dissection. To be on the safe side, you will still need permission from your physician to continue in the course. After consultation with your physician and Environmental Services, you may opt to wear a mask or other type of respirator. If you have a health condition that you think might be a problem in lab, please contact the course director.

Emergency

In case of emergency, call WSU police at 313-577-2222. For all other non-emergency medical situations, follow directions posted on laboratory doors or inform your laboratory instructors. If needed, there is a telephone adjacent to the basement elevators.

Care of the Cadavers

At the end of each session, water down or wrap the dissection in moist paper towels and replace the skin flaps. Cover with the plastic wrap and zip the body bag completely. The body bag should conceal the entire body; no parts should be visible. You are encouraged to examine and review dissections other than your own. The more examples you see, the better. However, you are to dissect only the body assigned to you and no other. When you have finished reviewing someone else’s dissection, put everything back in place, make certain the dissection is moist and wrap the body properly. Follow the Golden Rule and treat the cadavers of other students as you would want them to treat yours. If there is mold or other problems with preservation, please call it to the attention of Barbara Norgan in Room 525.

Dissection Assignments

Dissections are numbered. Consult the class schedule to determine dissection assignments. Some dissections can be completed within the assigned laboratory session, but many require extra time and effort for a quality end-product. The efficiency of dissection is greatly enhanced by reading the dissection guide assignment and reviewing the atlas in advance. You are expected to KNOW all structures MENTIONED in the dissection guide and to DISSECT all structures appearing in BOLD PRINT unless otherwise indicated by your instructors. It is required that students take turns dissecting. At the end of lab, review together your major findings. Expect to complete the details of the dissection and conduct reviews of the dissection during non-scheduled (open lab) times.
Laboratory Staffing

Each dissection room (310, 320, 330, 340) will be staffed by 2-faculty members that rotate to another room each unit. At various times, labs will also be staffed by 1-2 supplement instructional leaders who also perform noon-time reviews and run the practice practical sessions. At various times, physicians will visit the laboratory to share their knowledge of applied anatomy and clinical experiences.

Open Lab

The laboratory is open for dissection and review after hours from 5:00 - 10:00 PM weekdays and 9:00 AM - 5:00 PM on weekends. During normal working hours (9:00 AM – 5 PM weekdays), the labs may be open if there are no other scheduled events on the calendar. It is important to note that labs are CLOSED during a 2-day period prior to each unit exam. In order to be admitted to open lab, students must dress appropriately for laboratory dissection and wear their name tags. Students must also have their OneCard ready to show a lab guard in the event that identification is needed. Remember- you are not allowed to dissect a cadaver that you are not assigned. You may review structures on someone else’s cadaver, but make sure you wrap it up properly afterwards. Laboratory guards are on duty in Room 121 to oversee the appropriate use of open laboratory hours. They will document and report unprofessional behavior to the course director. Guards are prohibited from providing gross anatomy instruction to the students. There must be 2 lab guards on duty for open lab, otherwise cancellation will occur without notice and the labs will be locked. Students should email the course director if they cannot gain access to the labs during posted open lab hours.

Your Dissection Team

You will be given your table assignment and meet your dissection partners during orientation. Career success often depends on team-work and gross anatomy laboratory will provide you with an opportunity to develop these skills. Differences in style and approach can be worked out through effective communication. Work as a team by dividing tasks. The non-dissector for the day can conduct reviews and verbal quizzes, read instructions to the dissectors, or look up pictures in the atlas. The gross anatomy laboratory is a time when your entire class is together. Take this opportunity to make friends. Your professional development will be enhanced by sharing experiences with colleagues; they are sources of information, intellectual stimulation and emotional support.

Dissection Skills

Before taking up your instruments, you should have reviewed the dissection and:

• Have a clear mental picture of the region to be dissected.
• Have specific objectives.
• Be aware of key structures that can be inadvertently lost or damaged.
• Don’t cut what you can’t see.

Your primary instruments for dissection will be scalpel, forceps, scissors, probe and fingers. A video will be shown prior to the first laboratory demonstrating basic dissection techniques. Information is also provided in your dissection guide and your instructors can demonstrate methods. Treat scalpel blades with care. Attach and remove blades from the handle as
illustrated in the video. Place used blades in the Sharps Container. Always use a sharp blade to obtain a good dissection. Use your scalpel sparingly; once beyond the skin, you can separate most structures by “blunt dissection” with your fingers by working along natural planes of separation. If the space is too small for your fingers, then practice the spreading technique with your scissors: the scissors tip is inserted into a plane of separation and the tips spread to effect separation of tissues. Under no circumstances should you tear tissues, not only does it result in a messy unclear dissection, but it is disrespectful. Similarly, it is disrespectful to stick scalpels or probes in the donor’s body in a pin-cushion fashion. Other tools used in dissection include mallets, chisels, saws and bone cutters. These will be found in the drawer of your table. Striker saws (electric autopsy saws) will be issued for removal of calvaria and other special procedures.

Radiological Anatomy & Cross Sectional Anatomy

Radiological Anatomy (x-rays, MRI, CT, etc.) and Cross Sectional Anatomy are incorporated into this course so that you can relate knowledge gained through dissection to 3-dimensional understanding of the anatomy. Images are included in Blackboard and in Room 107. You are expected to know all the structures indicated and identification keys are included. You will see these and similar images on both written and practical examinations. Written and practical examinations may include questions regarding structures not included in the identification keys that you should be expected to know.

Faculty

Faculty members are present during regular laboratory hours to instruct, advise and demonstrate, but not to do the dissection for you. The names of your instructors for the unit will be posted on the door of each laboratory. Faculty members are not present during open lab. It is permissible to go to a table where an instructor is holding forth, but excessive shadowing of faculty is discouraged because it can interfere with instruction. Gross Anatomy Faculty teaching in the entire course include: Drs. Bagchi, Ettinger, Goebel, Ireland, Maisel, Peduzzi-Nelson, and Walker. This core faculty is augmented by additional staff teaching in 2 units: Drs. Berger and Xu. Instructors are available during regular laboratory hours to answer your questions and to provide information and advice concerning your dissection. If you require additional assistance, e-mail an instructor with your question or make an appointment to see an instructor.

Practical Exams

The logistics of the practical examinations will be explained prior to the first examination. Practical examination questions are generally either “identification” or “thought” in format. For identification questions, you are required to select the correct name of the tagged structure; in thought questions you are required to answer a question about the tagged structure. All questions are in single answer multiple-choice format. You have approximately 60 seconds in which to examine the tagged structure. Tags may be attached to dissected structures on cadavers, bones, prosections, radiographic images, cross section images, anatomical models or other appropriate examples. Unless indicated otherwise, the structure to be identified is at the end of an arrow or a string attached to a numbered hemostat. Only normal, representative examples are used for questions. SPECIMENS MAY NOT BE TOUCHED. Specimens are
never purposely placed in unusual positions; however, it is sometimes necessary in order to provide the best view. Always check the orientation of the specimen before answering the question. If you have a question regarding a tag, call the nearest instructor. However be aware that you are not allowed to ask interpretative questions. It is your responsibility to bring two or more sharpened No. 2 pencils, and an opaque clip board. A lab coat and rubber gloves are suggested. Since it is often cold in the labs, you should wear warm clothing. Wear comfortable shoes and visit the rest room prior to the examination. Books and notes are not allowed. Talking or communicating with other students is not allowed. Bathroom breaks are permitted only in cases of extreme urgency; time lost out of lab will cost you points. Announcements and instructions will be provided before the examination. The course pack and dissection guide will be used as the ultimate sources of information in adjudication of disputes regarding acceptable answers on practical examinations.