Course Title and Number: PT 606 Gross Anatomy Lab II for Physical Therapists

Description: Foundational science course that includes dissection of human cadavers. Basic structural and functional relationships of the musculoskeletal, integumentary, neuromuscular and cardiovascular/pulmonary systems are emphasized. Topographical and radiological correlations are utilized in combination with clinical correlations to enhance student learning.

Department Offering the Course**:** Physical Therapy

Credit Hours**:** 2 credit hours

Instructor(s**):** Gary Schindler, PT, PhD, DPT, OCS, SCS, ATC; Mark Romanick, PT, PhD, ATC

Clock Hours:

Lab/Discussion: 64 hours per semester Monday and Wednesday 10am – 12 noon

Course Prerequisites:

Registered in Professional Physical Therapy curriculum

Course Objectives:

At the completion of the course each student will be able to:

1. Identify, locate and illustrate during laboratory examinations and in clinical application, the major structures along with their function and relationships to each other in all regions of the body. This includes, but is not limited to, innervation, vascular supply, musculoskeletal structure and function, and connective tissue components. (SRE 7A)(Cognitive: Comprehension and Application; Psychomotor: Set and Mechanism)

2. Identify and/or discuss the structure and function of a typical joint and the specific functional anatomy of the shoulder, elbow, wrist joints and joints of the spine. (SRE 7A) (Cognitive: Comprehension and Application; Psychomotor: Set and Mechanism)

3. Identify the cranial nerves and peripheral nerve plexuses of the body, apply the information to muscles innervated by any cranial or peripheral nerve, and the resulting muscle dysfunction due to a particular nerve injury. (SRE 7A) (Cognitive: Comprehension and Application)

4. Identify the major structures and relationships of the contents of the thoracic and abdominal cavities including but not limited to the visceral structures, the sympathetic and parasympathetic innervations and vascular supply to the viscera, as well as skeletal and muscular structures located in the region. (SRE 7C) (Cognitive: Comprehension and Application)

5. Apply the anatomical knowledge presented in class along with appropriate evidence to the preparation of a patient case scenario and demonstrate professional communication skills in the presentation of the scenario to teach peers. (SRE 7B, 7D7,12) (Cognitive: Comprehension, Application; Psychomotor: Set, Mechanism)

6. Consistently demonstrate professional behavior and respect for faculty, peers and cadaveric materials throughout the course. (Affective: Responding)

Overarching goals:
At the end of the course, students are expected to have an adequate working knowledge of anatomy to enable them to:

1. Apply and integrate anatomical knowledge of the body in advanced course work in the professional curriculum.

2. Apply anatomical knowledge in clinical settings in order to adequately assess the source of impairment, functional limitations, and develop an appropriate intervention program for the client.

3. Recognize the range of normal variation in gross anatomical structures and be able to utilize this information during clinical examination and evaluation of clients.

Outline of Content and Assigned Instructor:

Content relating to upper extremity, arthrology, head, neck, and trunk are covered throughout the course.

Description of Teaching Methods and Learning Experiences:

Laboratory - lab consists of cadaver dissection, introduction to imaging, dry lab experiences with case studies
Discussion– case study presentations, online learning experiences, small group discussions with teaching assistants to review content and prepare for upcoming examinations, active learning with dry lab activities

Information is presented in laboratory, and discussion format. Independent learning is expected throughout the course to promote life-long learning in the anatomical sciences and their application to patient care practices. The course requires dissection and study of human cadaveric specimens working in groups of 4 students. Clinical case presentations prepared and presented by the students are used to enhance the learning experience in the laboratory. Discussion sessions allow the students to interact in small groups with teaching assistants, providing the opportunity for individual and group learning utilizing methods that can be tailored to the needs of the specific students. Group discussion and tutorial opportunities enhance the learning opportunities for the students.

Methods of Evaluation:

GRADING:

A	90% - 100%
B	80% - 91.9%
C	76% - 79.9%
D	70% - 75.9%
F	Below 70%

Passing requires a grade of C or better for the course. Grades are determined on a **total point basis.
To be eligible to take the final exam, cumulative written exam score must be above the 70% level.
The expectation is that every student in the course passes with a score higher than 80% as failure to master the foundational information in this course has the potential to impact success in future classes and professional practice.

Grades based on:

- Quizzes: Announced/Unannounced
- Clinical Case Presentations
- Lab Practical Exams: 3 covering specific blocks of material
- Participation: Discussion sections, Class Participation, Special Topics, Cadaver Dissection, and other assignments as directed throughout the term

*****No make-up exams are permitted in this course except in extreme circumstances (i.e. student is hospitalized). Student may be required to complete separate assignment if laboratory exam is missed.**

Any questions regarding grading of exams are to be handled in a professional manner and **in writing** with an explanation of your concern and your reference that includes the page number to justify your answer. Any correspondence concerning exams must be made within 1 week from the time exams are taken by the student. After that time, no alterations to exam grades will be made and existing score will be used for grade calculations.

Required Textbooks and Other Learning Resources:

Jeno/Keck: Anatomy for Allied Health 6th ed.
Moore: Clinically Oriented Anatomy, 8th Ed.
Color Atlas: Student's choice of numerous atlas' available (Netter's is available through the online system)

*Note: A Theme *Atlas of Anatomy* is provided for each dissecting table in the lab.

Anatomy Laboratory Manual
Instructor Schindler
Available on Blackboard only, each lab table will be provided with a hard copy of the Laboratory Manual

ACCOUNTABILITY

Independent learning is expected throughout this course. Students will be held responsible for material presented and dissected in laboratory, pertinent information covered in the texts related to the topics discussed in lab/discussion, and all material covered in the laboratory including laboratory manual, case presentations, and any additional information presented during laboratory sessions.

QUESTIONS/PROBLEMS

If, during the course of the semester, questions should arise, the first step is to approach the primary instructor, Dr. Gary Schindler. If satisfaction is not achieved, the Department Chair, Dr. Cindy Flom-Meland would be the next person to contact. Please refer to the Scholastic Standards Manual for further details. All questions regarding exams should be referred to Dr. Gary Schindler.

ACADEMIC INTEGRITY:

In accordance with the rules concerning scholastic dishonesty in the *Code of Student Life** at the University of North Dakota, I affirm that I understand these rules and I agree to comply with them.

I will not:

a) receive any additional information or assistance for any exam other that what was provided during class or approved tutor sessions
b) copy from another student's test
c) collaborate with or seek aid from another student who may have previously taken the exam
d) knowingly use, buy, sell, steal, or solicit in whole or in part the contents of any exam
e) bribe another person to obtain information about any exam

Department of Physical Therapy Honor Code Pledge:

"Upon my honor as a professional student in the physical therapy program at the University of North Dakota, I pledge that I will not give nor receive unauthorized aid on written examinations, laboratory practical examinations, written assignments, take home assignments or clinical assignments"

Examination disclaimer: "I affirm that I have adhered to the Honor Code in this assignment"

A. Forms of Academic Dishonesty. Academic dishonesty includes, but is not limited to:

1. Copying or distributing examination items
2. During testing, using crib notes or various forms of technology not authorized by faculty
3. Copying another student's written paper or examination, with or without their knowledge
4. Helping someone else cheat on a test
5. Communicating or collaborating during a test by electronic means such as telephone, texting or PDAs
6. Discussing test items or answers (written or laboratory) with students who have not yet taken the examination
7. Cutting and pasting text from any source without giving proper citation to that source
8. Plagiarism of any materials
9. Fabricating or falsifying written materials
10. Falsely reporting information or actions in clinical or classroom laboratories
11. Submitting the same paper, or a substantially similar paper, for the requirements of more than one course without the approval of the instructor(s) concerned
12. Submitting term papers or assignments written by another person
13. Consenting to having one's work used by another student as his or her own
14. Collaborating on a project (in person or via electronic means) when the instructor asked for individual work
15. Using a false excuse to obtain an extension on a due date or delay an examination
16. Depriving other students of necessary course materials by stealing books, periodicals, or other materials from libraries, AV centers, etc.

If problems occur, students are required to work through channels of communication to resolve the problem before going to the chair or dean. The channel is student, instructor, chair, associate dean health sciences, and dean. rev 2/06, 5/06, 5/07, 4/08, 5/09, 5/10, 5/11, 8/13, 8/14, 8/15, 8/16

NOTICE OF NONDISCRIMINATION

It is the policy of the University of North Dakota that no person shall be discriminated against because of race, religion, age, color, gender, disability, national origin, creed, sexual orientation, gender identity, genetic information, marital status, veteran's status, or political belief or affiliation and the equal opportunity and access to facilities shall be available to all. Concerns regarding Title IX, Title VI, Title VII, ADA, and Section 504 may be addressed to Donna Smith, Director of Equal Employment Opportunity/Affirmative Action and Title IX Coordinator, 401 Twamley Hall, 701.777.4171, und.affirmativeactionoffice@UND.edu or the Office for Civil Rights, U.S. Dept. of Education, 500 West Madison, Suite 1475, Chicago, IL 60611 or any other federal agency.

DISABILITY ACCESS STATEMENT

Contact me, Gary Schindler (office 777-6081, gary.schindler@und.edu, or visit Rm E-344 UND SMHS) to request disability accommodations, discuss medical information, or plan for an emergency evacuation. To get confidential guidance and support for disability accommodation requests, students are expected to register with DSS at UND.edu/disability-services 180 McCannel Hall, or 701.777.3425.

REPORTING SEXUAL VIOLENCE

If you or a friend has experienced sexual violence, such as sexual assault, domestic violence, dating violence or stalking, or sex-based harassment, please contact UND's Title IX Coordinator, Donna Smith, for assistance: 701.777.4171; donna.smith@UND.edu or go to UND.edu/affirmative-action/title-ix.

FACULTY REPORTING OBLIGATIONS REGARDING SEXUAL VIOLENCE

It is important for students to understand that faculty are required to share with UND's Title IX Coordinator any incidents of sexual violence they become aware of, even if those incidents occurred in the past or are disclosed as part of a class assignment. This does not mean an investigation will occur if the student does not want that, but it does allow UND to provide resources to help the student continue to be successful at UND. If you have been the victim of sexual violence, you can find information about confidential support services at UND.edu/affirmative-action/title-ix.

ENSURE ACCESSIBILITY

To comply with the latest accessibility guidelines, documents posted online, including, but not limited to, Adobe PDF files, Microsoft Word documents, Microsoft PowerPoint presentations, and online flipbooks, must be screen-reader friendly.
For directions on how to make your syllabus and other course materials accessible, go to Blackboard > Services > Atomic Learning > Creating an Accessible Syllabus (for technical assistance with Atomic Learning, contact UND Tech Support at UND.edu/tech-support).

UND CARES RESPONSE TEAM:

The UND Cares Response Team is available to assist with incidents involving UND students 24 hours a day, seven days a week. They respond to incidents such as major accidents, missing students, sickness that interferes with attending classes, death, suicidal ideations, situations

involving self-harm, psychological trauma and sexual violence. Contact directly at 701.777.2664 during regular business hours OR University Police Department 701.777.3491 after hours.

Laboratory Information

Required Equipment: Disposable Gloves, Latex Free (students purchase)

Provided Equipment: Theme's Atlas and Lab Manual for each dissection table
Dissection Tools for each table
Lab Coat, provided by the PT Department ($25 fee if not returned at end of semester)
Face Shields
Scalpel Blades (provided by department unless overuse occurs)

Attendance/Participation:

Attendance/Participation is required at all assigned lab sessions. Due to presence of chemicals used in preparation of the cadavers, if pregnant or planning to become pregnant during the semester, please notify the instructor. If any other situation would limit your attendance/participation in lab activities, please notify the instructor on the first day of class (or as soon as the situation becomes known) to determine appropriate course of action. Failure to do so may result in unsuccessful completion of the course.

Lab Rules: Lab coats are required at all times.
NO open toe shoes. Hair longer than shoulder length must be tied back.
NO FOOD OR DRINK ALLOWED IN LAB AT ANY TIME
Dissection is to occur **ONLY** during regular lab times **AND** a faculty member must be present in the lab.
See Lab Manual for additional information.

Independent learning is expected throughout this course. The lab is accessible to PT XXX students any time another class is not using the lab. DO NOT disturb Med Gross Labs on Tuesdays and Thursdays. The lab is to remain LOCKED at all times other than regularly scheduled lab times. *Visitors and guests are **NOT** allowed in the gross lab at any time.*

The cadavers we are privileged to utilize in the study of gross anatomy are graciously donated to the University through the Deeded Body Program. The opportunity to review and dissect the human body is a privilege that carries with it an important responsibility for treating the human cadaver with utmost respect and dignity. Conversational language of cadaver dissection outside the laboratory should be respectful and discreet and **discussing anatomy lab or the cadaver dissection in any electronic or social media forum is not allowable. Failure to abide by these guidelines may result in disciplinary action and/or dismissal from the course. If any student has a family member or friend that has donated their body to the University through the Deeded Body Program, please notify the course instructor.

COVID-19 Statement:

UND is committed to maintaining a safe learning environment while providing quality learning experiences for our students. COVID-19's continued presence within our UND community may necessitate changes in classroom management as the academic year progresses. As such, UND asks students and instructors to be flexible when necessary to promote a safe environment for learning. Please do not attend an in-person class or lab if you are feeling ill, particularly if you are experiencing symptoms of COVID-19, or if you have been directed by health professionals to quarantine or isolate. If you are not able to attend class or lab, please notify your instructor as soon as possible and discuss options for making up any missed work in order to ensure your ability to succeed in the course. If you will have an extended absence due to serious illness or other uncontrollable circumstances, you may request an absence notification through the Office of Student Rights and Responsibilities. Similarly, if your instructor is ill they may need to cancel class or temporarily move your course to online delivery to ensure that you are able to complete the course successfully. Instructors may require students to wear masks in the classroom or in the laboratory as a preventative measure designed to facilitate uninterrupted classroom engagement and to facilitate health and safety in the classroom. If your instructor does require masks in class or in a laboratory, you are expected to comply with that request.

UND also strongly encourages all members of the University community, including students, to get vaccinated, seek out testing when needed, and model positive behavior both on- and off-campus to foster a healthy and safe learning environment for all students. Individuals who would like to discuss disability accommodations regarding masks should contact the Disability Services for Students (DSS) office at 701-777-2664 or UND.dss@UND.edu. Individuals who are unable to wear a mask due to a sincerely held religious belief should contact the UND Equal Opportunity and Title IX Office at 701.777.4171 or UND.EO.TitleIX@UND.edu.

PT 606 LAB SCHEDULE SPRING 2023

W, 1/11	Coats, meet lab table/TA, Osteology, back extrinsics (10:00- 12:00)
R, 1/12	Back extrinsic/intrinsic/suboccipital (1:00-3:00)
F, 1/13	Back extrinsic/intrinsic/suboccipital (10:00-12:00)
M, 1/16	**Martin Luther King Day: NO CLASS**
W, 1/18	Scapular/Deltoid muscles
M, 1/23	Scapular/Deltoid/Posterior Arms
W, 1/25	Scapular/Deltoid/Posterior Arms
M, 1/30	Anterior Neck
W, 2/1	Anterior Neck
M, 2/6	Pectoral/Anterior Thorax/Axilla Region
W, 2/8	Pectoral/Anterior Thorax/Axilla Region
M, 2/13	Pectoral/Anterior Thorax/Axilla Region
W, 2/15	Anterior Arm
M, 2/20	**President's Day: NO CLASS**
W, 2/22	Anterior Arm
M, 2/27	Complete Dissections
W, 2/29	**Lab Table Review**
M, 3/6	**NO LAB: Mid-Term Week**
W, 3/10	**Mid-Term Lab Exam I (Thru anterior arm)**
M, 3/13	**SPRING BREAK**
W, 3/17	**SPRING BREAK**
M, 3/20	Extensors of Forearm: Dorsum of hand
W, 3/22	Extensors of Forearm: Dorsum of hand
M, 3/27	Extensors of Forearm: Dorsum of hand
W, 3/29	Flexors or forearm
M, 4/3	Flexors of forearm
W, 4/5	Flexors of forearm/Hands
M, 4/10	**Easter Monday: NO CLASS**
W, 4/12	Hands
M, 4/17	**Lab Table Review**
W, 4/19	**Lab Exam II (Thru Wrist)**
M, 4/24	Hands
W, 4/26	Internal Structures: Heart/Lungs/Posterior Thoracic Wall
M, 5/1	Internal Structures: Heart/Lungs/Posterior Thoracic Wall
W, 5/3	**Lab Table Review**
5/8 –12	**Finals Week: Final Lab Exam**