**University of Florida**

**College of Public Health & Health Professions Syllabus**

**PHT 6788: Functional Anatomy II (5)**

Spring: 2021

Delivery Format: On-Campus and Online
E-Learning

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| Office Hours: | by appointment | by appointment | by appointment | by appointment |

## Prerequisites*:* Students must be enrolled in the UF Doctor of Physical Therapy Program and successfully completed PHT6187: Functional Anatomy I

## PURPOSE AND OUTCOME

# Course Overview

This course is the second in the Functional Anatomy sequence at UF. Dissection covers the entire scope of the body - musculoskeletal, cardiopulmonary, integumentary, and organs. This new knowledge is applied to human movement and manual therapy through laboratory exercises, team learning and online content.  The focus of this second in a series of courses is in understanding complex movement (especially gait) and in application to Manual Therapies.

## Relation to Program Outcomes

This course both continues the foundational study of human anatomy, and extends this study to include application to movement analysis, musculoskeletal tests and measures, and manual therapy.

# Course Objectives and/or Goals

1. Demonstrate appropriate affective behaviors (at the level of 90%) during class lecture, classroom laboratory sessions, dissection lab, student presentations, and classroom and laboratory examinations. These behaviors include but are not limited to respect, consideration, communication, and professionalism. (Please refer to the generic abilities and professional development plan for more details). Students will use feedback to improve affective skills.
2. Define the anatomical and biomechanical terminology and use the terminology appropriately when discussing anatomical content in the classroom and in the laboratory.
3. Identify and locate the points of osteology as listed in the syllabus.
4. Discuss the joints of the body including classification and type, structures (ligaments and other) involved and their functions, and motions occurring at the joint.
5. Discuss the plexi indicating trunks, divisions, and cords from which each nerve emerges and give cord segments for each nerve with an asterisk.
6. Trace the course of each peripheral nerve finding branches to each muscle innervated and the cutaneous branches. Indicate the area of cutaneous innervation for each cutaneous nerve in the body per region.
7. Describe, identify and locate muscle attachments, nerve supply, and primary actions of muscles in the body per region.
8. Describe, identify and locate major arterial and venous structures in the body per region.
9. Describe, identify and locate the organs in the body per region
10. Discuss the relationship of structures in the body to one another:(arteries/veins/nerves/muscle layers/compartments/regions)
11. Explain the sequence of joint motion and muscle activity at complex joints and during complex movements
12. Define manual therapy
13. Identify boney landmarks and muscles through palpation.
14. Describe the mechanisms through which manual therapy may influence pain
15. Discuss the historical perspective for the use of manual therapy in physical therapy practice
16. Identify and explain definite and relative contraindications for the use of manual therapy
17. Apply biomechanical principals to use passive movements of joints arthokinematics for joint testing and interventions used by physical therapists
18. Explain and demonstrate muscle-, nerve-, and joint- based interventions used by physical therapists
19. Design simple tests of and interventions for musculoskeletal function
20. Describe how collagen-based tissues heal and the implications of that process on rehabilitation plans of care
21. Evaluate human movement for deviations and compensations and hypothesize possible causes for these deviations with emphasis on gait
22. Discuss the implications of changes in the neuromuscular system (injury, ageing, etc) for human gait, and hypothesize possible causes of deviations from typical gait.

## Instructional Methods

The class this semester is broken into several broad units - dissection (Senesac) and functional anatomy (Bishop) in the first part of the semester and application of functional anatomy to manual therapy interventions (Bialosky) in the second. Instructional methods will include lecture and dissection labs, online preparation for movement/gait analysis and laboratories for manual therapy.

**Blended Learning**

*What is blended learning and why is it important?*

A Blended Learning class uses a mixture of technology and face-to-face instruction to help you maximize your learning. Knowledge content that, as the instructor, I would have traditionally presented during a live class lecture is instead provided online before the live class takes place. This lets me focus my face-to-face teaching on course activities designed to help you strengthen higher order thinking skills such as critical thinking, problem solving, and collaboration. Competency in these skills is critical for today’s health professional.

*What is expected of you?*

You are expected to actively engage in the course throughout the semester. You must come to class prepared by completing all out-of-class assignments. This preparation gives you the knowledge or practice needed to engage in higher levels of learning during the live class sessions. If you are not prepared for the face-to-face sessions, you may struggle to keep pace with the activities occurring in the live sessions, and it is unlikely that you will reach the higher learning goals of the course. Similarly, you are expected to actively participate in the live class. Your participation fosters a rich course experience for you and your peers that facilitates overall mastery of the course objectives.

# DESCRIPTION OF COURSE CONTENT

# Topical Outline/Course Schedule: The schedule is posted on Canvas.

# Course Materials and Technology

TEXTS REQUIRED: These textbooks will be used both fall and spring terms:

Senesac CR, Bishop M: Finley’s Interactive Cadaveric Dissection Guide, available through Clinicians View:https://www.clinicians-view.com\University\

Biel, A: Trail Guide to the Body, 5thEdition, Books of Discovery, 2014.

One of:

Rohen, JW, Yokochi, C, Lutjen-Drecoll, E: Color Atlas of Anatomy, 7thedition,Wolters Kluwer/Lippincott Williams & Wilkins, 2010.

Gilroy AM, MacPherson BR, Ross LM, Schuenke, Schulte, Schumacher: Atlas of Anatomy, 3rdedition, Thieme Medical Publishers 2016.

RECOMMENDED:

Muscolino JE, Musculoskeletal Anatomy Coloring Book, 3rdedition, Elsevier 2017.

Moore: Clinically Oriented Anatomy, Keith L. Moore MSc PhD Hon. DSc FIAC,Arthur F. Dalley II PhD FAAA. 8thedition: Wolters Kluwer, 2017.

DISSECTION EQUIPMENT AND DRESS: Each student MUST have their own dissection kit! A dissection kit consisting of a probe, scalpel with handle #3 and blades #10, hemostat forceps (5 inch), and tissue forceps (without tooth) is REQUIRED. You will need approximately 20-30 blades(#10) for this semester. A lab coat will prevent fluids from staining your clothes and is RECOMMENDED. Plastic lab coats or aprons are not satisfactory. The Florida State Anatomical Board REQUIRES all persons handling cadaveric materials to wear gloves(latex). A mask is optional. A molded type of mask is recommended rather than the soft mask. These may be purchased through Amazon.com, Walmart, Sam’s, and pharmacies. You must wear close toe shoes in the laboratory NO open toe shoes may be worn in the lab.

\*If you arrive with open toe shoes you will be asked to leave the lab.

Items to bring to every lab period:dissection guide, atlas, dissection kit, gloves.\*If you do not have other required items you will be asked to leave the lab.

For technical support for this class, please contact the UF Help Desk at:

* [Learning-support@ufl.edu](file:///C%3A%5CUsers%5Chackg%5CDesktop%5CLearning-support%40ufl.edu)
* (352) 392-HELP - select option 2
* <https://lss.at.ufl.edu/help.shtml>

Point system used (i.e., how do course points translate into letter grades).

**Example:**

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| **Points earned** | **93-100** | **90-92** | **87-89** | **83-86** | **80-82** | **70-79** | **60-69** | **Below 60** |
| **Letter Grade** | A | A- | B+ | B | B- | C | D | E |

Please be aware that a C- is not an acceptable grade for graduate students. The GPA for graduate students must be 3.0. based on 5000 level courses and above to graduate. A grade of C counts toward a graduate degree only if based on credits in courses numbered 5000 or higher have been earned with a B+ or higher.

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| **Letter****Grade** | **A** | **A-** | **B+** | **B** | **B-** | **C+** | **C** | **C-** | **D+** | **D** | **D-** |  | **E** | **WF** | **I** | **NG** | **S-U** |
| **Grade****Points** | 4.0 | 3.67 | 3.33 | 3.0 | 2.67 | 2.33 | 2.0 | 1.67 | 1.33 | 1.0 | 0.67 |  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

# Exam Policy

# Policy Related to Make up Exams or Other Work

In extraordinary circumstances it may be possible to take an exam early or late. If for any reason you are unable to attend an exam at the last minute, you must notify the instructor as soon as possible by calling the front office and by email. Personal issues with respect to exams will be handled on an individual basis.

Please note: Any requests for make-ups due to technical issues MUST be accompanied by the UF Computing help desk (<http://helpdesk.ufl.edu/>) correspondence. You MUST e-mail me within 24 hours of the technical difficulty if you wish to request a make-up.

# Policy Related to Required Class Attendance

Attendance in Dissection Lab is mandatory. Please contact the instructor as soon as possible if you are unable toattend class for any reason. Personal issues with respect to class attendance or fulfillment of course requirements will be handled on an individual basis. Make an appointment with the instructor to discuss. An unexcused absence will result in a loss of points from your dissection lab grade.

Please note all faculty are bound by the UF policy for excused absences

Excused absences must be consistent with university policies in the Graduate Catalog and require appropriate documentation.

# STUDENT EXPECTATIONS, ROLES, AND OPPORTUNITIES FOR INPUT

## Communication Guidelines

# Email is the preferred method of communication with faculty. Please follow the guidelines provided in the student handbook. Questions about course material to the discussion boards.

# Academic Integrity

Students are expected to act in accordance with the University of Florida policy on academic integrity.  As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge:

 “**We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity**.”

You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied:

 **“On my honor, I have neither given nor received unauthorized aid in doing this assignment.”**

It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code.  Violations of the Honor Code at the University of Florida will not be tolerated.  Violations will be reported to the Dean of Students Office for consideration of disciplinary action.  For additional information regarding Academic Integrity, please see Student Conduct and Honor Code or the Graduate Student Website for additional details:

<https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>

<http://gradschool.ufl.edu/students/introduction.html>

Please remember cheating, lying, misrepresentation, or plagiarism in any form is unacceptable and inexcusable behavior.

# Online Faculty Course Evaluation Process

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at <https://evaluations.ufl.edu>. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at

<https://evaluations.ufl.edu/results/>.

**Policy Related to Guests Attending Class:**

Only registered students are permitted to attend class. However, we recognize that students who are caretakers may face occasional unexpected challenges creating attendance barriers.  Therefore, by exception, a department chair or his or her designee (e.g., instructors) may grant a student permission to bring a guest(s) for a total of two class sessions per semester.  This is two sessions total across all courses.  No further extensions will be granted.  Please note that guests are **not** permitted to attend either cadaver or wet labs.  Students are responsible for course material regardless of attendance. For additional information, please review the Classroom Guests of Students policy in its entirety.  Link to full policy: <http://facstaff.phhp.ufl.edu/services/resourceguide/getstarted.htm>

# SUPPORT SERVICES

# Accommodations for Students with Disabilities

If you require classroom accommodation because of a disability, it is strongly recommended you register with the Dean of Students Office <http://www.dso.ufl.edu> within the first week of class or as soon as you believe you might be eligible for accommodations. The Dean of Students Office will provide documentation of accommodations to you, which you must then give to me as the instructor of the course to receive accommodations. Please do this as soon as possible after you receive the letter. Students with disabilities should follow this procedure as early as possible in the semester. The College is committed to providing reasonable accommodations to assist students in their coursework.

# Counseling and Student Health

Students sometimes experience stress from academic expectations and/or personal and interpersonal issues that may interfere with their academic performance. If you find yourself facing issues that have the potential to or are already negatively affecting your coursework, you are encouraged to talk with an instructor and/or seek help through University resources available to you.

* The Counseling and Wellness Center 352-392-1575 offers a variety of support services such as psychological assessment and intervention and assistance for math and test anxiety. Visit their web site for more information: <http://www.counseling.ufl.edu>. On line and in person assistance is available.
* You Matter We Care website: <http://www.umatter.ufl.edu/>. If you are feeling overwhelmed or stressed, you can reach out for help through the You Matter We Care website, which is staffed by Dean of Students and Counseling Center personnel.
* The Student Health Care Center at Shands is a satellite clinic of the main Student Health Care Center located on Fletcher Drive on campus. Student Health at Shands offers a variety of clinical services. The clinic is located on the second floor of the Dental Tower in the Health Science Center. For more information, contact the clinic at 392-0627 or check out the web site at: <https://shcc.ufl.edu/>
* Crisis intervention is always available 24/7 from:

Alachua County Crisis Center:
(352) 264-6789
<http://www.alachuacounty.us/DEPTS/CSS/CRISISCENTER/Pages/CrisisCenter.aspx>

Do not wait until you reach a crisis to come in and talk with us. We have helped many students through stressful situations impacting their academic performance. You are not alone so do not be afraid to ask for assistance.

**Inclusive Learning Environment**

Public health and health professions are based on the belief in human dignity and on respect for the individual. As we share our personal beliefs inside or outside of the classroom, it is always with the understanding that we value and respect diversity of background, experience, and opinion, where every individual feels valued. We believe in, and promote, openness and tolerance of differences in ethnicity and culture, and we respect differing personal, spiritual, religious and political values. We further believe that celebrating such diversity enriches the quality of the educational experiences we provide our students and enhances our own personal and professional relationships. We embrace The University of Florida’s Non-Discrimination Policy, which reads, “The University shall actively promote equal opportunity policies and practices conforming to laws against discrimination. The University is committed to non-discrimination with respect to race, creed, color, religion, age, disability, sex, sexual orientation, gender identity and expression, marital status, national origin, political opinions or affiliations, genetic information and veteran status as protected under the Vietnam Era Veterans’ Readjustment Assistance Act.” If you have questions or concerns about your rights and responsibilities for inclusive learning environment, please see your instructor or refer to the Office of Multicultural & Diversity Affairs website: [www.multicultural.ufl.edu](http://www.multicultural.ufl.edu)