

University of Florida
College of Public Health and Health Professions
Department of Occupational Therapy
OTH 6242 Clinical and Functional Kinesiology (3 credit hours)
Spring 2021

Delivery Format: Online and On-Campus
 Mondays 3:15 – 5:15 in **HPNP Auditorium or Zoom** and Thursdays 1:55-2:45 on **Zoom**

Course Instructor: Orit Shechtman, Ph.D., OTR/L
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 Office Hours: Wednesdays 3:00 – 4:30, or by appointment

Preferred Method of Communication is email.

Prerequisites: anatomy and physiology, Co-requisites: OTH 6432

PURPOSE AND OUTCOME

Course Overview:

This course provides the student with understanding of normal human movement and gives a clinical perspective to the science of movement and to the pathology movement as deviation from the norm. Both kinematics (describing movement) and kinetics (the forces influencing movement) will be addressed. The course is designed for occupational therapy (OT) students with focus on clinical application of kinesiology to support development in children, rehabilitation in adults, and participation throughout the lifespan.

Relation to Program Outcomes:

This course is one of the basic science courses taught in the first year of the OTD program. The knowledge gained in this course is necessary for subsequent courses addressing clinical assessment and treatment across the lifespan.

Course Objectives and/or Goals

This course partially meets one of the Education Standards for the American Council for the Accreditation of OT Education (ACOTE). The student will:

- B.1.1. Demonstrate knowledge of the structure and function of the human body to include the biological and physical sciences, neurosciences, kinesiology, and biomechanics. (*Theme: Human Occupation and Health*)

More specifically, at the conclusion of this course, the student will be able to to perform the following:

1. Demonstrate knowledge of terminology and basic concepts of kinematics, kinetics, physiology and control of movement and muscle activity
2. Establish a schema of movement according to the involved bones, joints, and muscles for the upper extremities, lower extremities, trunk, neck and head. Additionally, determine the specific features of movement and the possible functional deficiencies for these specific regions.
 - a. For the upper extremities: the shoulder complex, elbow complex, wrist and hand.
 - b. For the lower extremities: the pelvis, hip, knee, ankle, and foot.
3. Analyze functional movements relating to posture, balance, lifting, reaching, grasping, walking, and performing activities of daily living (ADLs).
4. Compare and contrast movements of healthy humans with movements impaired by selected pathological conditions.
5. Perform movement analysis to evaluate performance of specific activities including:
 - a. The movement(s) occurring at joints throughout the body.
 - b. The types of muscle contractions occurring during the specific movement.
 - c. The agonist(s), antagonist(s) and synergist(s) contributing to the movement.
 - d. Grasping activities of healthy individuals and people with certain disorders.

Instructional Methods

The students will participate in lecture and learning activities. Some material will be delivered using blended learning.

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:

Week	Date(s)	Topic(s)	Chapter
1	1/11-1/14	Introduction and terminology Kinematics: principles	Ch.1
2	1/21	Kinematics: principles (cont.) Muscle physiology	Ch. 1 Ch. 3-4
3	1/25-1/28	Muscle physiology (cont.)	Ch. 3-4
4	2/1-2/4	Kinetics: mechanical principles	Ch. 2
5	2/8-2/11	Kinetics: mechanical principles (cont.)	Ch. 2
6	2/15-2/18	Movement analysis and Shoulder complex	Ch. 5 & Suppl.
7	2/22-2/25	Shoulder complex EXAM 1: Thursday 2/25 from 4:00 – 5:30	Ch. 5
8	3/1-3/4	Elbow Complex	Ch. 6
9	3/8-3/11	Wrist and Hand	Ch. 7
10	3/15-3/18	Wrist and Hand	Ch. 7
11	3/22-3/25	Pelvis and hip	Ch. 9
12	3/29-4/1	Knee EXAM 2: Thursday 4/1 from 4:00 – 5:30	Ch. 10
13	4/5-4/8	Ankle and foot	Ch. 11
14	4/12-4/15	Functional activities	Ch. 12-14
15	4/19	Functional activities	Ch. 12-14
16	4/26	EXAM 3: Monday 4/26 from 11:00–12:30	

*****Note: this is a tentative schedule!*****

Course Materials and Technology

Class notes are posted on Canvas and are accessed via the E-learning Website: <http://elearning.ufl.edu/>

Required:

1. Required reading materials will be posted on E-learning for every class (noted as S in the syllabus). E-Learning Website: <http://elearning.ufl.edu/>
2. Textbook: Houglum, P.A., and Bertoti, D.B.: Brunnstrom's Clinical Kinesiology (Newest Edition). F.A. Davis Company, Philadelphia, PN. (ISBN: 978-0-8036-2352-1)
3. TopHat classroom response system will be used in class. You must have access to it. URL: <http://app.tophat.com/>. The 6-digit course code is XXXXXX.

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

- <http://helpdesk.ufl.edu/>
- (352) 392-HELP (4357) - select option 2

ACADEMIC REQUIREMENTS AND GRADING

Assignments

The class grade is based on the following: quizzes, exams, activity analysis assignments. And professional behavior.

- Quizzes: there are online quizzes (open book) and in class quizzes for a total of 100 points. Most questions are objective: matching, true/false and multiple choice.
- Exams: there are three exams; each is composed of 60 questions. The point value of each exam is listed in the table below. Multiple choice questions are used to assess critical thinking in relation to knowledge and skills learned in the course and are provided in the style used on the NBCOT Certification Exam (e.g., there may be more than one "right" answer, but the student must identify the "best" answer). The exams also include case studies with multiple questions pertaining to each case study. In addition, matching questions are used for definitions and diagrams. The exams will be administered online using Honorlock. Before taking your first exam, please view this link [How to use Honorlock Student Video](#). The exams will take place **NOT** during class but rather on specified afternoons beginning after 4:00 pm.
- Assignments: there are three group assignments on movement analysis, each worth 50 points. The purpose of the first assignment is to analyze normal whole-body functional movement. The purpose of the second assignment is to analyze normal grasp patterns for manipulation of various daily life items. The purpose of the third assignment is to characterize the differences between normal movement and movement dysfunction. In the third assignment, students will perform an activity analysis on a person with a specific movement disorder and compare it to normal movement while focusing on muscle balance\imbalance.
- Professional behavior points: are based on attendance, group work, and respectful behavior in class.

Grading

The total points of all quizzes, exams, and assignments determines your letter grade (see the 3 tables below).

Assignment/Exam/Quiz	# of questions	Points per question	Points per test	Percent of Grade
Exam 1	60	3	180	22.5
Exam 2	60	3	180	22.5
Exam 3	60	3	180	22.5
Assignment 1A & 1B	Variable	Variable	60	7.5
Assignment 2A	25 points each		50	6.25
Assignment 2B			60	7.5
Professional Behavior			80	10
Total Points			10	1.25
Assignment 1A & 1B			800	100

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

Points earned	744-800	720-743	696-719	664-695	640-663	616-639	560-615	536-559	504-535	480-503	0-479
Percent Grade	93-100	90-92	87-89	83-86	80-82	77-79	70-76	67-69	63-66	60-62	0-59
Letter Grade	A	A-	B+	B	B-	C+	C	D+	D	D-	E

Letter Grade: Letter grade to grade point conversions are fixed by UF and cannot be changed.

Letter Grade	A	A-	B+	B	B-	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	1.33	1.0	0.67	0.0	0.0	0.0	0.0	0.0

More information on UF grading policy may be found at:

<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

Exam Policy

Exams are administered on Canvas. You will be taking the exams on your own computer. You must pre-install Honorlock before taking the exam. Exams will take place on specified days beginning at 4:00 pm or later. Students who need accommodations for in-class exams must contact the Disability Resource Center and make arrangements prior to the exam.

Policy Related to Make up Exams or Other Work

Any requests for make-ups due to an excused absence must be submitted to the instructor via email within 48 hours of missing an exam. The student will coordinate with the instructor to schedule a date, time, and place to make up the exam. Any work that is submitted late due to technical issues MUST be accompanied by the email received from the Help Desk when the problem was reported to them. The email will document the time and date of the problem. You MUST email the instructor within 24 hours of the technical difficulty if you wish to request a late submission without points deducted. See "Assignment Policies" below for more information about late assignments.

Student Grade Issues: If students have issues with a grade, they must submit their concerns in writing to the grading faculty member with documentation to support their position prior to meeting with that faculty member. Refer to the Grievance Policy in the OTD Student Manual.

Policy Related to Required Class Attendance

Attendance to all exams and class activities is mandatory. All students will be held responsible for all material presented and discussed in class activities regardless of attendance. If possible, a student who must be late or absent to a class activity should notify the instructor prior to the scheduled time in order to schedule makeup activities. Some experiences cannot be made up. For students with an excused absence an alternative activity will be provided.

If possible, faculty should be informed of absences prior to the time of the scheduled activity (exam, site visit, assignment deadline, presentation), unless it is an illness or emergency.

- A student must notify the instructor via email prior to the anticipated absence if possible.
- See the "Policy Related to Make up Exams or Other Work" above related to missing exams.
- See the Attendance Policy in the OTD Student Manual for procedures on turning in the Absence Petition Form.

Please note all faculty are bound by the UF policy for excused absences. For information regarding the UF Attendance Policy see the Registrar website for additional details:

<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

STUDENT EXPECTATIONS, ROLES, AND OPPORTUNITIES FOR INPUT

Expectations Regarding Course Behavior

Professional Behavior is expected at all times, and can be defined as:

1. Students are expected to look on Canvas for announcements and get the notes prior to **each** class and to read the assigned readings prior to class.
2. Personal responsibility for prompt arrival, and regular participation and attendance in all course activities; with appropriate and judicious use of class and lab time.
3. Assumption of responsibility in keeping classroom in order and laboratory materials properly utilized and stored.
4. Treatment of peers, professors, teaching assistants, guest lecturers, clinical personnel, clients and their families with consideration, confidentiality, and respect.
5. See the information on absences in "Attendance Policies" above and the Absence Policy in the *OTD Student Handbook* published on the OTD program website. All faculty are bound by the UF policy for excused absences. For information regarding the UF Attendance Policy, see the Registrar website for additional details: <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx> .
6. Students are expected to be thoroughly prepared for class. Students are expected to read and study assigned readings and complete assigned preparatory activities as indicated on the course website and syllabus prior to coming to class. Students are expected to bring all materials necessary to effectively participate or those specifically designated by the instructor to class or lab.
7. Professional work habits also include: being on time for class and staying until class is dismissed; being courteous in lecture and lab by refraining from chatter or other distracting behaviors; turning off all electronic devices; not reading other material during class; meeting deadlines; arranging with instructor or peer to get handouts or announcements if unable to attend class; arranging with the instructor in advance if unable to meet scheduled tests and assignments.
8. Students are expected to actively participate in discussions and lab activities. Participation assists students to develop knowledge and skill in interpersonal relationships and communication by relating to patients and families with various backgrounds and performance deficits, by relating to other students, therapists and supervisors, students gain an understanding of relationships in their professional role.
9. Lecture notes and/or Power Point slides are provided solely at the discretion of the presenter. Regardless of the provision of lecture notes/Power Point slides, students are responsible for all materials assigned and covered in class, labs, and site visits.
10. **Laptops/Tablets:** these devices may be used in class for taking notes, viewing slides, or accessing websites related to ongoing class activities. Students are not allowed to use laptops in class for any other reason.

Communication Guidelines

Faculty will contact students through Canvas or through ufl.edu email addresses. Please sign up to receive notifications from Canvas so that you are aware of new messages and announcements. Students should check their ufl.edu email daily. For digital communication expectations see: *Netiquette Guidelines*: <http://teach.ufl.edu/wp-content/uploads/2012/08/NetiquetteGuideforOnlineCourses.pdf>

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.php.ufl.edu/services/resourceguide/getstarted.htm>

COVID-RELATED PRACTICES

Online Synchronous Sessions: Lecture sessions will be audio-visually recorded on Zoom for students in the class to refer back and for enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. The chat will not be recorded or shared. As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited.

On Campus Face-to-Face: For lab, we will have face-to-face instructional sessions to accomplish the student learning objectives of this course. In response to COVID-19, the following policies and requirements are in place to maintain your learning environment and to enhance the safety of our in-classroom interactions.

- You are required to wear approved face coverings and face shields at all times during class (for CDC guidelines: <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/cloth-face-cover-guidance.html>). Following and enforcing these policies and requirements are all of our responsibility. Failure to do so will lead to a report to the Office of Student Conduct and Conflict Resolution.
- This course has been assigned a physical classroom with enough capacity to maintain physical distancing (6 feet between individuals) requirements. Please utilize designated seats and maintain appropriate spacing between students. Please do not move desks or stations.

- Sanitizing supplies are available in the classroom if you wish to wipe down your desks prior to sitting down and at the end of the class.
- Follow your instructor's guidance on how to enter and exit the classroom. Practice physical distancing to the extent possible when entering and exiting the classroom.
- If you are experiencing COVID-19 symptoms ([Click here for guidance from the CDC on symptoms of coronavirus](#)), please use the UF Health screening system and follow the instructions on whether you are able to attend class. [Click here for UF Health guidance on what to do if you have been exposed to or are experiencing Covid-19 symptoms](#).
- Course materials will be provided to you with an excused absence and you will be given a reasonable amount of time to make up work. [Find more information in the university attendance policies](#).

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.

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center by visiting <https://disability.ufl.edu/students/get-started/>. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

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
