

University of Florida
College of Public Health and Health Professions
Department of Occupational Therapy
OTH 5435 Therapeutic Skills 1: Biomechanics
Summer C 2017
Thursdays 8:30am-11:30am
Room: 1104 unless otherwise noted on weekly topic schedule

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Instructor

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MUST email prior to coming to office hours

PURPOSE STATEMENT

The purpose of this course is to provide the student with lecture and laboratory study that will focus on using the Biomechanical Frame of Reference for assessment and intervention. Students gain skills in analysis of movement, muscle palpation, goniometry of range of motion, and manual muscle testing. Students will acquire knowledge and skills in administering standardized hand strength tests, and assessments for edema. Adjunct treatment utilizing superficial thermal modalities will be introduced, with assessment of blood pressure, and pulse rate for patient care. Of primary concern will be integration of assessment skills and application to biomechanical intervention approaches, and intensive opportunity and practice in professional and peer communication skills.

ACOTE STANDARDS / GENERAL OBJECTIVES

Upon the conclusion of this course, given the lecture, reading assignments, and laboratory assignments, the student will:

1. Understand the biomechanical frame of reference strengths and limitations when structuring a treatment plan
 - a) Understand the models of practice and frames of reference used in OT (B 3.2)
 - b) Understand how theories, models of practice, and frames of reference are used in OT evaluation and intervention (B 3.3)
2. Develop the ability to communicate through the basic therapeutic processes of establishing client rapport, and professional physical contact, proximity and therapeutic touch
 - a) Provide therapeutic use of self, including one's personality, insights, perceptions, and judgments as part of the therapeutic process in both individual and group interaction (B 5.6)
 - b) Demonstrate an understanding of health literacy and the ability to educate and train the client, caregiver, family and significant others, and communities to facilitate skills in areas of occupation as well as prevention, health maintenance, health promotion, and safety (B 5.18)
 - c) Effectively interact through written, oral, and nonverbal communication with the client, family, significant others, colleagues, other health providers, and the public in a professionally acceptable manner (B 5.20)
3. Perform goniometric and muscle strength evaluation in a simulated setting according to established procedures
 - a) Use appropriate procedures and protocols when administering assessments (B.4.3)
4. Demonstrate knowledge of administration of standardized testing, in a simulated setting, which assess upper extremity strength, range of motion and edema, and how the results fit into the treatment decision-making process
 - a) Use standardized and non-standardized screening tools to determine the need for OT intervention (B.4.1)
 - b) Ability to interpret criterion referenced and norm referenced standardized test scores (B.4.6)
 - c) Interpret evaluation data in relation to uniform terminology and relevant theoretical frameworks (B.4.8)
 - d) Organize, collect and analyze data in a systematic manner for evaluation of practice outcomes (B.5.26)

5. Demonstrate knowledge of biomechanical principles as applied to body mechanics, fine and gross motor activities, and engagement in occupation
 - a) Ability to analyze tasks relative to performance areas, components, and contexts (B.2.7)
 - b) Consider factors that might bias assessment results (B.4.7)
 - c) Interpret evaluation findings based on appropriate theoretical approaches, models of practice and frames of reference (B.5.1)
6. Become familiar with adjunct modality therapies and their role in enhancing patient outcomes in treatment. Specific superficial thermomodalities include moist heat, paraffin wax, contrast baths, and therapeutic use of ice.
 - a) Demonstrate safe and effective application of superficial thermal and mechanical modalities as a preparatory measure to manage pain and improve occupational performance, including foundational knowledge, underlying principles, indications, contraindications, and precautions. (B.5.15)
7. Demonstrate accurate documentation of range of motion, manual muscle testing procedures, and thermomodalities.
 - a) Document OT services to ensure accountability of service provision and meet standards for reimbursement (B 5.32)
 - b) Document occupational therapy services to ensure accountability of service provision and to meet standards for reimbursement of services, adhering to the requirements of applicable facility, local, state, federal, and reimbursement agencies. Documentation must effectively communicate the need and rationale for occupational therapy services. (B.4.10)
8. Demonstrate accurate assessments of blood pressure and pulse.

REQUIRED MATERIALS

Textbook:

Clarkson, H. (2013). *Musculoskeletal Assessment (3rd ed.)*. Philadelphia: Lippincott Williams & Wilkins.

***You are required to bring your textbook to class each day.**

App Subscription:

Top Hat:

- Itunes: <https://itunes.apple.com/us/app/top-hat-lecture/id674069291?mt=8>
- Android: <https://play.google.com/store/apps/details?id=com.tophat.android.app&hl=en>
- Website: <https://app.tophat.com/>

OPTIONAL MATERIALS

Van Ost, L. (2012). *Cram Session in Manual Muscle Testing: A Handbook for Students & Clinicians (1st ed.)* SLACK Incorporated.

Van Ost, L. (2013). *Cram Session in Goniometry: A Handbook for Students & Clinicians (1st ed.)*. SLACK Incorporated.

COURSE POLICIES AND PROCEDURES

1. **Grading:** This is a skills course, and therefore, you will be required to learn the skills of measuring joint range and muscle strength testing with accuracy. To receive a grade for this course, it is mandatory that you demonstrate competency with ROM and manual muscle testing (**Pass** all Check-offs and Competencies). Students who do not initially pass a Check-off/Competency must successfully retake all portions of a comparable Check-off/Competency before the end of the Summer C semester in order to earn a final grade for this course. Otherwise, you will receive an **Incomplete** for the semester, regardless of your performance on the written quizzes and exam. Required repetition of a Check-off will also result in a deduction of professionalism point(s) in addition to a reduction of points as posted on the corresponding grading form. Performance during Competencies will follow grading guidelines listed on respective Competency grading form (loaded on course website).

The following reflects the percentages toward the total grade.

Format	# available	Total Points Possible	Contribution to Grade
Peer Check-offs		P/F	Mandatory Pass
Competency 1	1	75 points	15%
Competency 2	1	75 points	15%
Competency 3 (with clients)	1	100 points	20%
Lab Worksheets in class		P/F	Mandatory Pass
Top Hat Quizzes and Participation	Top 5 grades chosen (7 total)	25 total points (5 points total each)	5 %
Online (Open Book) Quizzes	7	50 points (7-13 points each)	10%
Comprehensive Written Exam	1	75 points	15 %
Biomechanical Activity Analysis assignment	1	50 points	10 %
Self-Study Worksheets		P/F	Mandatory Pass
Professionalism (see professionalism point sheet and syllabus below)	Daily	50 points	10%
Total		500 points	100%

Letter Grade Calculation Table:

GRADE	PERCENT	POINTS
A	93-100	465-500
A-	90-92	450-464
B+	87-89	435-449
B	83-86	415-434
B-	80-82	400-414
C+	77-79	385-399

GRADE	PERCENT	POINTS
C	73-76	365-384
C-	70-72	350-364
D+	67-69	335-349
D	63-66	315-334
D-	60-62	300-314
E	0-59	0-299

2. Structure of Check-offs & Competencies.

- A. UE ROM:** UE ROM Check-offs/competencies will involve working in pairs to demonstrate ability to accurately and efficiently measure UE ROM. Students will be assigned a time and partner for Check-offs/Competencies. Once in front of the instructor, each student will randomly select a series of motions to measure on their partner, and will then act out their role as a therapist using their partner as the client. The amount of time allocated for each Check-off/Competency appointment reflects the time necessary for the student to complete the ROM assessment ASSUMING the student is adequately prepared. Students who demonstrate inadequate preparation will be required to repeat the Check-off/Competency at a later time/date
- B. UE MMT (e.g. competencies):** UE MMT competencies will also involve working in pairs, similar to procedures described for ROM (above). However, for MMT procedures, the “client” will act out a predetermined muscle strength level so that the “therapist” can assess the strength. This means that the “therapist” must have proficiency with the testing procedures while both the “therapist” and the “client” will need to have proficiency with the muscle grading procedures.

2. Professional Behavior: Professional behavior by OT students is expected *always*. Points will be docked (and communicated with student). Initial infraction will carry a *warning*; however, each additional infraction will carry a 5-point deduction. Examples of expected behavior include, but are not limited to, the following:

- a) Personal responsibility for prompt and regular class participation and attendance to class, labs, and exams; with judicious use of class and lab time.
- b) Assumption of responsibility to keep room in order, and responsible handling of time and materials associated with inside and outside class assignments.
- c) Treatment of peers, professors, guest lecturers, clinical personnel, patient participants and their families, with consideration and respect.
- d) Out of consideration and respect for others, all cell phones and electronic devices are SILENCED before class.
- e) No disruptive talking during demonstrations and lecture material.
- f) Email all communication to instructors regarding unforeseen circumstances that affect class attendance or other class matters.
- g) Completion of chart and its components
- h) Clinical level professionalism is expected for all Check-offs/Competencies. This includes (1) arriving on time, (2) having good proficiency with testing procedures, (3) bringing own goniometers, chart, and applicable paperwork (4) wearing UF ID so that it can be easily read, and (5) use of professional communication & demeanor.

Out of respect for our volunteer clients, students with a professional behavior score of under 80 points before the final competency will not be allowed to participate in the final competency with the live clients and will have to complete the competency with the instructor. If this must occur, then a 10% deduction from the final score will occur.

3. Dress Code FOR THIS CLASS ONLY

For the purposes of muscle and joint palpation, as well as muscle identification:

Ladies: Shorts or workout leggings type gym attire, and sleeveless shirts, tank tops/ or t-shirts

Gentlemen: Shorts, gym attire and tank top/ or short sleeves t- shirt

Bring other clothing for your afternoon class.

Lockers are located on the 1st floor by the OT lab. (1107)

4. Attendance to class is required: students are responsible for all material assigned, presented, and discussed in class regardless of attendance. Attendance for all class activities, practical check-offs, exams, and worksheets are mandatory. All students will be held responsible for all material presented and discussed in class activities regardless of attendance. It is the responsibility of the student who must be late or absent to a class activity to notify the instructor prior to the scheduled time in order to schedule makeup activities. Some experiences, labs or activities cannot be made up.

A student who must be absent or late for class must notify Mrs. Simpson or Ms. Jegher in *advance* of the class.

There are no makeup exams/quizzes/labs/Check-offs/Competencies allowed unless the absence is excused as defined in the MOT handbook and approved by the department as well as course instructors. Make-ups for exams, competencies and quizzes will only be approved prior to the time of the test conditional upon the submission of a completed and APPROVED Excused Absence Petition form (Appendix H of the MOT Student Handbook). Submit approved forms to Mrs. Simpson or Ms. Jeghers. Students missing an exam, quiz, lab or Competency without notification and approval as described above will be given a grade of 0% on that assessment.

All assignments are due by time and date indicated. Late submissions, if accepted, are subject to late submission penalty.

5. Assignments: Lab assignments and worksheets may be written legibly in *black* ink. Biomechanics Analysis assignment is to be typed. Correct spelling, grammar, legibility, accuracy, logical thought sequence, continuity, smooth transitions and correct referencing are expected for all assignments. Professional level communication is expected on all written work (e.g. use of single line strikethroughs when errors are made). References are to be cited in APA format using the Publication Manual of the American Psychological Association. This reference manual should be used to clarify writing format and style.

All assignments submitted electronically must be submitted using Microsoft Word format (.doc/.docx), or Rich Text format (.rtf), or Portable Document format (.pdf) unless otherwise specified by the instructor.

6. Academic Honesty: In this professional program, we are particularly sensitive to ethical and honest conduct by our students. Occupational therapy students are bound by the academic honesty guidelines of the university. All students are subject to these guidelines and the student conduct code as printed in the University of Florida, Undergraduate Catalog and Graduate Catalog.

The honor code states:

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

The following statement will be placed on all exams and assignments:

“On my honor, I have neither given or received unauthorized aid on this assignment.”

Further details regarding the University of Florida honesty policy is available at:

<http://www.aa.ufl.edu/rules/407.htm>.

7. Accommodations for students with disabilities: Students requesting accommodations must first register with the Office of Students with Disabilities. This office (www.dso.ufl.edu/drc) will provide documentation to the student who will then provide it to the instructor upon requesting the accommodation.

8. Student Wellness and Counseling: Students may occasionally have personal issues that arise in the course of pursuing higher education or that may interfere with their academic performance. If you find yourself facing problems affecting your coursework, you are encouraged to talk with an instructor and to seek confidential assistance at the University of Florida Counseling and Wellness Center, 352-392-1575. Visit their web site for more information: <http://www.counseling.ufl.edu/>.

Crisis intervention is always available 24/7 from Alachua County Crisis Center: (352) 264-6789.

Crisis Text Line: (<http://www.crisistextline.org/>) Text HOME to 741741

BUT – 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.