University of Florida
College of Public Health & Health Professions Syllabus
OTH 5435 Therapeutic Activities: Biomechanics
Summer: 2016
Delivery Format: On-Campus
http://elearning.ufl.edu

Instructor: Heather Simpson, MOT, OTR
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Office hours: Thursday; 1:00 -3:00
Room # 2113

Instructor: Joanne J. Foss, PhD. OTR/L
Contact Information: jfoss@phhp.ufl.edu
Office Hours: Tuesday, 3:00 – 5:00 or by appt.
Room #2112

Instructor: Wendy Holt, OTR/L
Contact Information: wholt28@gmail.com
Office hours: By appointment
Room # 2113

Prerequisites
OTH 4412/OTH 4412L, OTH 3413

PURPOSE AND OUTCOME
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
   - Understand the models of practice and frames of reference used in OT (B. 3.2)
   - 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
   - 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. 5.7)
   - 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
   - Use appropriate procedures and protocols when administering assessments (B.4.3)
• Select appropriate assessment tools based on client’s needs, contextual factors and psychometric properties of the test. (B.4.32)

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
   • Use standardized and non-standardized screening tools to determine the need for OT intervention (B.4.1)
   • Ability to interpret criterion referenced and norm referenced standardized test scores (B.4.6)
   • Interpret evaluation data in relation to uniform terminology and relevant theoretical frameworks (B.4.8)
   • Organize, collect and analyze data in a systematic manner for evaluation of practice outcomes (B.5.30)

5. Demonstrate knowledge of biomechanical principles as applied to body mechanics, fine and gross motor activities, and engagement in occupation
   • Ability to analyze tasks relative to performance areas, components, and contexts (B.2.7)
   • Consider factors that might bias assessment results (B.4.7)
   • Interpret evaluation findings based on appropriate theoretical approaches, models of practice and frames of reference (B.3.3)

   • Demonstrate the use of superficial thermal and mechanical modalities as a preparatory measure to manage pain and improve occupational performance. Demonstrate safe and effective application of superficial thermal and mechanical modalities (B.5.15)

7. Demonstrate accurate documentation of range of motion, manual muscle testing procedures, and thermomodalities.
   • Document OT services to ensure accountability of service provision and meet standards for reimbursement (B. 5.32)

8. Demonstrate accurate assessments of blood pressure and pulse.

DESCRIPTION OF COURSE CONTENT

Topical Outline/Course Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Date(s)</th>
<th>Topic(s)</th>
<th>Readings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5/13</td>
<td>Introductions Class Procedures Anatomy review quiz</td>
<td>Chapter 1 &amp; 3</td>
</tr>
<tr>
<td>2</td>
<td>5/20</td>
<td>Shoulder – ROM and Prime Movers</td>
<td>Online lecture</td>
</tr>
<tr>
<td>3</td>
<td>5/27</td>
<td>Shoulder – clinical observations of shoulder Documentation and peer checkoff</td>
<td>Chapter 4 &amp; 5</td>
</tr>
<tr>
<td>4</td>
<td>6/3</td>
<td>Elbow/forearm/wrist - ROM and prime movers</td>
<td>Online lecture</td>
</tr>
<tr>
<td>5</td>
<td>6/10</td>
<td>Elbow/forearm/wrist Documentation and peer checkoff</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>6/17</td>
<td>Finger – ROM and prime movers clinical observations of forearm/elbow/wrist and fingers</td>
<td>Online lecture</td>
</tr>
<tr>
<td>7</td>
<td>6/24</td>
<td>Finger – Documentation and peer checkoff</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>7/8</td>
<td>Competency #1 Grip &amp; Pinch testing</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>7/11</td>
<td>Shoulder – MMT Documentation in muscle testing</td>
<td>Online lecture</td>
</tr>
<tr>
<td>10</td>
<td></td>
<td>Elbow/forearm/wrist/finger – MMT</td>
<td>Online lecture</td>
</tr>
</tbody>
</table>
Week | Date(s) | Topic(s) | Readings
---|---|---|---
11 | | Elbow/forearm/wrist/finger – MMT Peer checkoff | |
12 | | Competency # 2 | |
13 | | Thermo-modalities | Online lecture
14 | | Thermo-modalities checkoff Measuring BP/Vital signs and edema | |
15 | | Comprehensive competency exam and written exam | |

**Course Materials and Technology**

For technical support for this class, please contact the UF Help Desk at:
- Learning-support@ufl.edu
- (352) 392-HELP - select option 2
- https://lss.at.ufl.edu/help.shtml

**ACADEMIC REQUIREMENTS AND GRADING**

**Grading**

<table>
<thead>
<tr>
<th>Format</th>
<th># available</th>
<th>Total Points Possible</th>
<th>Contribution to Grade</th>
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<tbody>
<tr>
<td>Peer Check-offs</td>
<td>5</td>
<td>P/F</td>
<td>Mandatory Pass</td>
</tr>
<tr>
<td>Competency 1</td>
<td>1</td>
<td>50 points</td>
<td>10 %</td>
</tr>
<tr>
<td>Competency 2</td>
<td>1</td>
<td>50 Points</td>
<td>10 %</td>
</tr>
<tr>
<td>Competency 3</td>
<td>1</td>
<td>56 points</td>
<td>20 %</td>
</tr>
<tr>
<td>Quizzes</td>
<td>3</td>
<td>135 total points</td>
<td>27 %</td>
</tr>
<tr>
<td>Written Test</td>
<td>1</td>
<td>100 points</td>
<td>20 %</td>
</tr>
<tr>
<td>Biomechanical Activity Analysis assignment</td>
<td>1</td>
<td>40 points</td>
<td>8 %</td>
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<tr>
<td>Functional LE assignment</td>
<td>1</td>
<td>P/F</td>
<td>Mandatory Pass</td>
</tr>
<tr>
<td>Professionalism Attendance, Timeliness, Participation &amp; Communication Completion of Peer Check-offs Completion of worksheets, documentation sheets, &amp; assignments Chart completeness and neatness Name tag visibly worn at all times Being prepared for class</td>
<td>Daily</td>
<td>25 points</td>
<td>5 %</td>
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<tr>
<td><strong>Total</strong></td>
<td></td>
<td>500</td>
<td>100%</td>
</tr>
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<table>
<thead>
<tr>
<th>Points earned</th>
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<th></th>
<th></th>
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<tbody>
<tr>
<td>500-465</td>
<td>464-450</td>
<td>449-435</td>
<td>434-430</td>
</tr>
<tr>
<td>429-415</td>
<td>414-385</td>
<td>384-365</td>
<td>364-350</td>
</tr>
<tr>
<td>349-335</td>
<td>334-315</td>
<td>314-300</td>
<td>Under 299</td>
</tr>
<tr>
<td>Letter Grade</td>
<td>A</td>
<td>A-</td>
<td>B+</td>
</tr>
<tr>
<td></td>
<td>B-</td>
<td>C+</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>D+</td>
<td>D</td>
<td>D-</td>
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</table>

Please be aware that a C- is not an acceptable grade for graduate students. In addition, a grade of C counts toward a graduate degree only if an equal number of credits in courses numbered 5000 or higher have been earned with an A.
You must include the letter grade to grade point conversion table below. Letter grade to grade point conversions are fixed by UF and cannot be changed.

<table>
<thead>
<tr>
<th>Letter Grade</th>
<th>A</th>
<th>A-</th>
<th>B+</th>
<th>B-</th>
<th>C+</th>
<th>C-</th>
<th>D+</th>
<th>D-</th>
<th>E</th>
<th>WF</th>
<th>I</th>
<th>NG</th>
<th>S-U</th>
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<tbody>
<tr>
<td>Grade Points</td>
<td>4.0</td>
<td>3.67</td>
<td>3.33</td>
<td>3.0</td>
<td>2.67</td>
<td>2.33</td>
<td>2.0</td>
<td>1.67</td>
<td>1.33</td>
<td>1.0</td>
<td>0.67</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

For greater detail on the meaning of letter grades and university policies related to them, see the Registrar’s Grade Policy regulations at: [http://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx](http://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx)

Exam Policy

Policy Related to Make up Exams or Other Work

Please note: Any requests for make-ups due to technical issues MUST be accompanied by the ticket number received from LSS when the problem was reported to them. The ticket number will document the time and date of the problem. 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

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](https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx)

STUDENT EXPECTATIONS, ROLES, AND OPPORTUNITIES FOR INPUT

Expectations Regarding Course Behavior

Communication Guidelines

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/](https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/) [http://gradschool.ufl.edu/students/introduction.html](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](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/](https://evaluations.ufl.edu/results/).

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**SUPPORT SERVICES**

**Accommodations for Students with Disabilities**

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, [www.dso.ufl.edu/drc/](http://www.dso.ufl.edu/drc/)) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodations. Students with disabilities should follow this procedure 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 website for more information: [http://www.counseling.ufl.edu](http://www.counseling.ufl.edu). On line and in person assistance is available.
- You Matter We Care website: [http://www.umatter.ufl.edu/](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 website at: [https://shcc.ufl.edu/](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](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.