Course: Therapeutic Modality Interventions in Physical Therapy  
Course Number: PHT 6218C  
Credits: 2 Credit Hours  
Delivery Method: Hybrid (online and face-to-face) & Laboratory  
Class Schedule: Monday: Lab A: 10:30-12:30; Lab B: 2:00-4:00  

Course Instructors:  
Judi Schack-Dugré, PT, DPT, MBA, EdD  
Office: HPNP Room 1150  
jschack@phhp.ufl.edu  
Office Hours: by appointment  

Joel Bialosky, PT, PhD  
Office: HPNP Room 1158  
bialosky@phhp.ufl.edu  
Office Hours: by appointment  

Clinicians:  
Christina Pettie, PT pettic@shands.ufl.edu  
Margaret Wicinski, PT, DPT, EdD mawdpt@hotmail.com  

Teaching Assistant:  
Kanika Bansal: kanika.bansal@phhp.ufl.edu  

Course prerequisites: PHT 6153, PHT 6187C, PHT 6605, PHT 6206C, PHT 6188C, PHT 6189C, PHT 6207C, PHT 6152C  

Course Description:  
This course is designed to instruct physical therapy students in the underlying principles and clinical applications of thermal, electrical and mechanical modalities. An emphasis will be placed on problem solving and patient education when using these modalities. The focus of laboratory sessions is the demonstration of safety and appropriate clinical application of thermal, electrical, and mechanical modalities. Use of the modalities to address the treatment of clinical symptoms including inflammation, muscle re-education, pain and other dysfunctions will be discussed.  

Course Objectives:  
Upon successful completion of this course the student be able to complete the following at no less than an 80% threshold:  

1. Explain the complex, multidimensional, and individual specific nature of pain.
2. **Present** theories and science for understanding pain
3. **Define** terminology for describing pain and associated conditions
4. **Describe** the impact of pain on society
5. **Use** valid and reliable tools for measuring pain and associated symptoms to assess and reassess related outcomes as appropriate for the clinical context and population
6. **Describe** patient, provider, and system factors that can facilitate or interfere with effective pain assessment and management
7. **Assess** patient preferences and values to determine pain-related goals and priorities
8. **Demonstrate** empathic and compassionate communication during pain assessment
9. **Demonstrate** the inclusion of patient and others, as appropriate, in the education and shared decision-making process for pain care
10. **Analyze** the clinical findings, propose goals of treatment, determine the best interventions, and formulate an effective treatment plan including treatment parameters for achieving the goals of treatment when presented with a clinical case.
11. **Analyze** the physiologic and therapeutic effects and efficacy of the modalities presented in class.
12. **Differentiate** the indications and contraindications/precautions of the biophysical agents presented in class.
13. **Apply** appropriate methods for selecting a modality and treatment parameters to produce the desired physical and physiological effects.
14. **Demonstrate** safe and effective application of modalities demonstrated in class.
15. **Research** the literature to critically analyze applicability of the findings to modality selection and treatment choices.
16. **Educate** the patient and/or family member regarding the effects and use of modalities.

**Instructional Methods:**
This course will use a combination of active learning strategies online and in the traditional classroom. A flipped classroom approach will be the primary model used for the didactic component of this course. Additional teaching strategies utilized are voice-over and traditional PowerPoint lectures, video, large and small group discussion/activities, case studies and skills lab performance.

**Course Website:**
In the Canvas system, found at [http://lss.at.ufl.edu/](http://lss.at.ufl.edu/).

**Required Textbook:**
Laboratory:

Self-Responsibility:
Laboratory instruction provides a hands-on learning environment in which each participant is evaluated and treated by his or her partner. It is the responsibility of each student to monitor his or her own limitation of class participation.

Safety
- To insure your safety in the lab, you are responsible for providing your lab partners and instructors with relevant information and feedback in order to prevent any injury. **If you have a condition that is a contraindication to the treatment procedure, inform the instructor via email and also in lab prior to the initiation of lab activities and inform your partner prior to the initiation of any lab activities.**
- Each piece of equipment that you will be using has specific guidelines for safe use, and it will be your responsibility to seek these guidelines and to follow through with the recommendations set forth.

Lab Clothes
Please wear proper lab clothes as outlined in the student handbook allowing exposure of the trunk, scapulae, and extremities. Please respect your classmates’ physical privacy as you would patient privacy.

Eating/Drinking: Due to the nature of our lab activities and the use of equipment, **no eating will be permitted in BPA lab classes.** You may use time between classes or on break to eat. You may bring a drink to class as long as there is some type of a cover on the cup/bottle/etc.

Lab Clean-up
Students will be assigned to prepare and clean up on scheduled lab days. This includes assuring all equipment is stored in its original containers with all appropriate components in its assigned location, pillows returned and laundry to be placed in appropriate containers.

Lab Schedule:
Each lab will follow a similar schedule which includes: Introduction to and instruction of the equipment, in class lab activities, practice time, patient problems and check offs. Lab times on Monday will not be sufficient time for you to learn and master the use of the equipment. Please take advantage of the open lab time. We can also set up special times for those who may need additional time to practice.
**Testing and Grading:** Students' performance will be assessed by online and competency assessments and written assignments as indicated below.

<table>
<thead>
<tr>
<th>Practical</th>
<th>30%</th>
<th>60 points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Specific Effects Assignment - 20 points</td>
<td>10%</td>
<td>20 points</td>
</tr>
<tr>
<td>Quizzes - 8 quizzes x 5 points</td>
<td>20%</td>
<td>40 points</td>
</tr>
<tr>
<td>Exams - midterm and final x 40 points each</td>
<td>40%</td>
<td>80 points</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100%</td>
<td><strong>200 points</strong></td>
</tr>
</tbody>
</table>

**Midterm and Final Exams:**
The exams will cover class and lab lectures/discussions. Grading will follow the standard grading scale listed above.

**Quizzes:**
Quizzes will cover the assigned lecture modules and reading for the corresponding class. With the exception of the first class, each class will begin with a quiz on assigned material.

**Peer review Check Offs:**
The practice of physical therapy relies heavily on clinical and evaluative skills. An emphasis is placed on evaluating students' skills and performing interventions using patient simulations. Each student will be required to have a peer-reviewed check off on all modalities we cover in class. Additionally, each student will also be required to observe, assess and provide feedback to peers in lab class. Emphasis for check offs is on safety, professionalism, and the ability to select and correctly perform the skills being observed.

A score of 70% (10.5/15 pts) or above must be obtained to receive a “satisfactory” on a peer review check off. No points are awarded toward the final grade for a “check off”. A passing score is required on each modality check off and it is the students' responsibility to do so prior to the end of the semester to fulfill the requirements of this course. Peer review check offs will be conducted during each class period and will use a peer rater with a rubric. Digital completion forms that outline outcomes from both roles as therapists & peer evaluator (including the specific modality, score, and feedback provided) must be submitted to Canvas by each student at the end of each lab day (no later than 11:59 PM EST.) to successfully meet the requirements of this course.

A safety issue can result in automatic failure. Students will be given the opportunity to repeat check offs if they do not earn a satisfactory during class time. This will need to be coordinated by the student with one of the instructors/TAs during the same week of the lab session.
ASSIGNMENT:

Homework Assignment:
One written assignment related to “non-specific effects” of treatment will be posted on Canvas. This assignment is designed to be an individual effort.

Please submit your final product to Canvas by 5:00 pm on the date indicated on the syllabus. Assignments will be accepted late with an automatic 20% deduction in your score.

The honor code (below) should be included on each written homework assignment.

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

Grading Criteria:

<table>
<thead>
<tr>
<th>Grade Scale (%)</th>
<th>Total Points</th>
<th>Grade</th>
<th>Grade Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>93 - 100</td>
<td>185.0 – 200.0</td>
<td>A</td>
<td>4.00</td>
</tr>
<tr>
<td>90 - 92</td>
<td>179.0 - 184.9</td>
<td>A-</td>
<td>3.67</td>
</tr>
<tr>
<td>87 - 89</td>
<td>173.0 - 178.9</td>
<td>B+</td>
<td>3.33</td>
</tr>
<tr>
<td>83 - 86</td>
<td>165.0 -172.9</td>
<td>B</td>
<td>3.00</td>
</tr>
<tr>
<td>80 - 82</td>
<td>159.0 - 164.9</td>
<td>B-</td>
<td>2.67</td>
</tr>
<tr>
<td>70 - 79</td>
<td>131.0 – 158.9</td>
<td>C</td>
<td>2.00</td>
</tr>
<tr>
<td>60 - 69</td>
<td>119.0 – 130.9</td>
<td>D</td>
<td>1.00</td>
</tr>
<tr>
<td>&lt;60</td>
<td>&lt;119.0</td>
<td>E</td>
<td>0.00</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
# Class Schedule - Summer 2019

## PHT 6218C Therapeutic Modality Interventions in Physical Therapy

<table>
<thead>
<tr>
<th>Date</th>
<th>Topics</th>
<th>Assignment</th>
</tr>
</thead>
</table>
| **May 13** | • Course Introduction  
• Introduction to Therapeutic Modalities  
• Thermal agents: cold and heat  
• Ultrasound  
• QUIZ #1 (online) | Dr. Bialosky/CP/KB  
Read: CH 1 – 4 Michlovitz  
Study: Online Content  
Begin: Non-specific Assignment Due: July 30 |
| **May 20** | • QUIZ #2  
• Foundation of Clinical Electrotherapy - Review  
• Electrodes  
• Low frequency ES  
o TENS  
o Iontophoresis  
• Medium frequency ES  
o Interferential (IFC) | Dr. Schack/MW/CP/KB  
Read: CH 9  
CH 10  
CH 11: 346 – 349 (IFC)  
Study: online content |
| **May 27** | **Holiday – Memorial Day** |                                                    |
| **June 3** | • QUIZ #3  
• NMES  
o Russian  
o HVGS  
• FES | Christina Pettie/Dr. Schack/MW/KB  
Read: CH 14: FES  
Study: Online Content  
Review: CH 9: 272 – 273 (Russian)  
273 – 275 (HVGS)  
CH 10: 299 – 306  
Optional: CH13 |
<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
<th>Reading Material</th>
<th>Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 10</td>
<td>• QUIZ #4</td>
<td>Read: CH 13: 393 – 396 (Bio) CH 14: 425-426 (Bio w/ FES) CH 15: 439 – 441 (UV); 444 – 445 (IR) 452-453 (Laser)</td>
<td>Online Content</td>
</tr>
<tr>
<td></td>
<td>• Electromagnetic Spectrum</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Biofeedback</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>June 17</td>
<td></td>
<td><strong>Exam 1 – in class (online)</strong></td>
<td></td>
</tr>
<tr>
<td>June 24</td>
<td></td>
<td><strong>Practical Exam</strong></td>
<td></td>
</tr>
<tr>
<td>July 1</td>
<td>• QUIZ #5</td>
<td></td>
<td>Online Content</td>
</tr>
<tr>
<td></td>
<td>• Introduction to pain</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Anatomy of pain</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Sensitization</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Variability of measurement</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Quantitative sensory testing</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>July 8</td>
<td>• QUIZ #6</td>
<td></td>
<td>Online Content</td>
</tr>
<tr>
<td></td>
<td>• Measurement of Pain</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Sensory domain</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Psychological influences</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Physical function</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>July 15</td>
<td>• QUIZ #7</td>
<td></td>
<td>Online Content</td>
</tr>
<tr>
<td></td>
<td>• Contextual influences on pain</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• General Treatment Considerations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>July 22</td>
<td>• QUIZ #8</td>
<td>*** Non-Specific Effects assignment due by 5:00 pm today***</td>
<td>Online Content</td>
</tr>
<tr>
<td></td>
<td>• Specific Pain Conditions</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Fibromyalgia</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Myofascial pain</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• CRPS</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Neuropathic pain</td>
<td></td>
<td></td>
</tr>
<tr>
<td>July 29</td>
<td></td>
<td><strong>Exam 2</strong></td>
<td></td>
</tr>
</tbody>
</table>

Dr. Schack/MW/KB

Dr. Schack/MW/CP/KB

Dr. Bialosky

Dr. Bialosky

Dr. Bialosky
PHYSICAL THERAPY PROGRAM POLICIES FOR ALL COURSES

Attendance is expected for all class sessions, labs, and examinations. In the rare instance a student is unable to attend class, they are required to make every attempt to notify and then email the instructor in advance of class. Travel is not a valid reason for missing class. It is the student’s responsibility to obtain course materials that they miss in a timely fashion.

Policy Related to Make-up Exams or Other Work: Students missing class because of an emergency or excused absence should contact the instructor regarding the ability to complete missed exams, quizzes, or assignments and with fellow students to obtain class notes/hand-outs or to gain information about lab activities. The ability to make up missed quizzes and exams is at the instructor’s discretion and will be determined on a case by case basis.

Punctuality is important in both the clinic and classroom. Students are expected to arrive to class on time (i.e. prior to the instructor initiating class) and to return from breaks on time. The clock in the classroom will be considered the “official” clock. You are encouraged to notify your instructor(s) when appointments/unavoidable commitments will cause arrival to class after start time, or require you to leave early. It is also the responsibility of the instructor to begin and end class at agreed upon times, and to notify you when changes of schedule may occur.

Course Accommodations:
If for any reason you feel you will have difficulty meeting the objectives and expectations of this course, please notify me within five (5) weekdays of the start of class so that accommodations may be implemented where indicated. Individuals who require reasonable accommodations must contact the Dean of Students Office, 202 Peabody Hall, phone: 392-1261, as soon as possible. This office will provide necessary documentation. The student who is requesting accommodation must then provide this documentation to the instructor.

Academic Integrity & Professional Behavior
Professional behavior is critical for a successful transition from the classroom to the clinical setting. The faculty recognizes the importance of this by incorporating the development and evaluation of professional behaviors into each academic course. Professional behavior is described in the Student Handbook that each student receives and acknowledges reading and understanding upon beginning the DPT program. Professional behavior is expected at all times including but not exclusively during scheduled class, curricular and clinical activities, extracurricular professional events, community and clinical activities. Cheating, lying, misrepresentation or plagiarism in any form is unacceptable and inexcusable behavior.

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

Furthermore, students are expected to act in accordance with the University of Florida policy on academic integrity. See Student Conduct Code, Students Rights
and Responsibilities, the Graduate Student Handbook or these websites for more details:
https://sccr.dso.ufl.edu/students/student-conduct-code/
https://sccr.dso.ufl.edu/process/students-rights-responsibilities/
http://graduateschool.ufl.edu/media/graduate-school/pdf-files/handbook.pdf

All students must attain developmentally appropriate levels of professionalism on the University of Florida’s Professionalism Development Tool (PDT). Student performance on the PDT will be determined by behaviors in the classroom and lab. Additional feedback will be provided by peers, instructors, and teaching assistants.

Counseling and Student Health

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 UF Counseling & Wellness Center, 352-392-1575. Visit their web site for more information: http://www.counseling.ufl.edu/.

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, including primary care, women’s health care, immunizations, mental health care, and pharmacy 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: www.health.ufl.edu/shcc

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

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.