

PHT6218C Therapeutic Modality Interventions in Physical Therapy (3 credit hours)

Summer 2023

Delivery Format: Blended Online & Lab Course

E-Learning: Canvas Course Site for PHT6218C Summer 2023

Instructor Name: **Judi Schack-Dugré, PT, DPT, MBA, EdD, FNAP**

Room Number: HPNP 1137

Email Address: jschack@php.ufl.edu

Cell: 352 278-2491

Teaching/Lab Assistants:

Dr. Sabrina Wang, Sabrina.Wang@jax.ufl.edu

Dr. Melinda Petty, Melinda.Petty@jax.ufl.edu

Prathyusha Bellam bellam.prathyush@ufl.edu

Residents:

Taylor McCullers, Taylor.McCullers@jax.ufl.edu

Michael Staklinski, Michael.Staklinski@jax.ufl.edu

Jordan Lowery, Jordan.Lowery@jax.ufl.edu

Instructor Name: **Joel Bialosky, PT, PhD**

Room Number: CLC 214

Email Address: bialosky@php.ufl.edu

All Office Hours: by appt

Preferred Course Communications: email

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

Purpose and Outcome

Course Overview

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. The science of pain and its implication to physical therapy practice will be studied.

Relation to Program Outcomes:

Course Objectives and/or Goals

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 physiologic and therapeutic effects of the biophysical agents as an adjunct to a rehabilitation plan of care.
11. Differentiate the indications and contraindications/precautions of the biophysical agents presented in class.
12. Formulate an effective treatment plan using a biophysical agent including treatment parameters.
13. Demonstrate safe and effective application of modalities demonstrated in class.
14. Educate the patient and/or family member regarding the effects and use of modalities.

Instructional Methods

This course will use a combination of online teaching strategies (synchronous and asynchronous) and lab immersion. Teaching strategies utilize a variety of technology tools including: voice-over PowerPoint lectures, PowerPoint with scripts, video, web-based meetings, case studies and skills lab performance.

Blended Learning

What is blended learning and why is it important?

A [Blended Online Class](#) primarily uses technology to deliver learning content with some 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 lab 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 lab 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/Assignments *All Modality labs are in HPNP Rms 1109 and 1104

University of Florida
Department of Physical Therapy

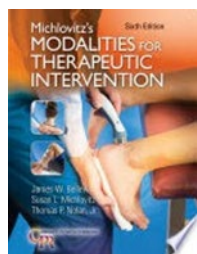
Date (Sun – Sat)	Topics	Assignment
Dr. Schack Wk: May 14 – 20 Wed 5/17	<ul style="list-style-type: none"> • Intro to course • Introduction to Therapeutic Modalities • Thermal agents: cold and heat • Ultrasound • QUIZ #1 (online) • Purchase your electrodes if you have not yet 	Lab A 9:30A – 12 (noon) Lab B 1 – 3:30P Quiz #1 due: Saturday May 20 at 11:59P EDT
May 21- 27 Wed 5/24	<ul style="list-style-type: none"> • QUIZ #2 • Foundation of Clinical Electrotherapy - Review • Electrodes • Low frequency ES <ul style="list-style-type: none"> ○ TENS ○ Iontophoresis • Medium frequency ES <ul style="list-style-type: none"> ○ Interferential (IFC) 	Lab A 9:30A – 12 (noon) Lab B 1 – 3:30P Bring electrodes Quiz #2 due Saturday May 27 at 11:59P EDT
May 28 – June 3 Wed 5/31 (Memorial Day – Mon May 30)	<ul style="list-style-type: none"> • QUIZ #3 • NMES <ul style="list-style-type: none"> ○ Russian ○ HVGS • FES 	Lab B 9:30A – 12 (noon) Lab A 1 – 3:30P Bring electrodes Quiz #3 due before Saturday June 3 at 11:59P EDT (Memorial Day weekend)
June 4 - 10 Wed 6/7	<ul style="list-style-type: none"> • QUIZ #4 • Biofeedback • Practice cases for competencies 	Lab B 9:30A – 12 (noon) Lab A 1 – 3:30P Bring electrodes Quiz #4 due Saturday, June 10 at 11:59P EDT **June 10 Saturday 9 – noon – Extra practice session - optional – HPNP 1104/1109)
June 11 – 17 Wed 6/14	Lab and Competencies	Competency/Practical Bring electrodes 9A – 6P Schedule to be determined.
June 18- 24 (Wed 6/21)	Exam (on campus and online. Bring computers.)	June 21 in class HPNP Rms: 1104 & 1109 9:00 - 1 P
Dr. Bialosky June 26- July 2 (Wed 6/28)	<ul style="list-style-type: none"> • QUIZ #5 • Introduction to pain • Anatomy of pain • Sensitization • Variability of measurement • Quantitative sensory testing 	HPNP Rms 1104 & 1109 9:30 am - 11:30 am Watch online modules and <u>take quiz</u> prior to class

July 3- July 7 (Wed 7/5)	<ul style="list-style-type: none"> • QUIZ #6 • Measurement of Pain <ul style="list-style-type: none"> ○ Sensory domain ○ Psychological influences ○ Physical function 	HPNP Rms 1104 & 1109 9:30 am - 11:30 am Watch online modules and <u>take quiz</u> prior to class
July 10 – July 14 (Wed 7/12)	<ul style="list-style-type: none"> • QUIZ #7 • Contextual influences on pain 	HPNP Rms 1104 & 1109 9:30 am - 11:30 am Watch online modules and <u>take quiz</u> prior to class
July 17- July 21 (Wed 7/19)	<ul style="list-style-type: none"> • Quiz #8 • Treatment Considerations 	HPNP Rms 1104 & 1109 9:30 am - 11:30 am Watch online modules and <u>take quiz</u> prior to class
July 24- July 28 (Wed 7/26)	<ul style="list-style-type: none"> • QUIZ #9 • Specific Pain Conditions <ul style="list-style-type: none"> ○ Fibromyalgia ○ Myofascial pain ○ CRPS ○ Neuropathic pain 	HPNP Rms 1104 & 1109 9:30 am - 11:30 am Watch online modules and <u>take quiz</u> prior to class
July 31- August 4	Pain Exam and Pain Assignment Due by 5 pm 8/2	Exam will be made available after class 7/26. Must be submitted through Canvas by 5:00 pm 8/2.

Course Materials and Technology

Electrodes – all students are required to purchase individual electrical stimulation electrodes for this course. Students should bring electrodes to all lab sessions and to the competency assessment. See Canvas website for specific details.

Recommended Textbook:



Bellew, J.W., Michlovitz, S. L., Nolan, T. P. (2016). *Modalities for Therapeutic Intervention*. (6th ed.). Philadelphia, PA: F. A. Davis Company. (Available in the bookstore.)

Technology:

Students will need a lap top computer within internet access (or electronic device) to take in-class quizzes/exams, to complete their preparatory assignments, and to attend to class each session.

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

Assignments & Grading

Competency Assessments	30%	60 points
Pain Assignment - 20 points	10%	20 points
Quizzes - 9 quizzes x 5 points	20%	45 points
Exams - 1) Pain Science and 2) Biophysical Agents x 40 points each (20% each)	40%	80 points
Total	100%	205 points

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

Grade Scale (%)	Total Points	Grade	Grade Points
93 - 100	191.0 – 205.0	A	4.00
90 - 92	184.5 – 190.9	A-	3.67
87 - 89	178.0 – 184.4	B+	3.33
83 - 86	170.0 -177.9	B	3.00
80 - 82	164.0.0 - 169.9	B-	2.67
70 - 79	143.5 – 163.9	C	2.00
60 - 69	123.0 – 143.4	D	1.00
<60	<123.0	E	0.00

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 that have been earned with a B+ or higher.

More information on UF grading policy may be found at:

<http://gradcatalog.ufl.edu/content.php?catoid=10&navoid=2020#grades>

Exam Policy

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 is at the instructor's discretion and will be determined on a case-by-case basis. Making up a missed exam will be determined on a case-by-case basis and a minimum of 10% reduction will be assigned from earned grade regardless of the reason for the missed exam.

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 the faculty lead within 24 hours of the technical difficulty if you wish to request a make-up.

Policy Related to Required Class Attendance

Attendance is expected for all class sessions, labs, competencies, and examinations. Lab sessions, competencies and exams are mandatory attendance. 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 lack in a timely fashion. Students are not required to attend Zoom meetings, but attendance is highly encouraged.

Excused absences must be consistent with university policies in the Graduate Catalog (<http://gradcatalog.ufl.edu/content.php?catoid=10&navoid=2020#attendance>).

Additional information can be found here: <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

Student Expectations, Roles, and Opportunities for Input

Expectations Regarding Course Behavior

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 ensure 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. You will also be required to sanitize your equipment and environment following its use in preparation for the next student.

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 or during any assessments.** You may use time between classes or during the class break to eat. You may bring a drink to class as long as there is some type of cover on the cup/bottle/etc.

Lab Clean-up

Students will be assigned to prepare and clean up the classroom on scheduled lab days. This includes assuring all equipment is set out for each lab session in a neat and orderly manner and is also stored in its original containers with all appropriate components in its assigned location, pillows returned and laundry to be placed in appropriate containers, etc. It is the responsibility of all students to sanitize equipment and tables/supplies before you leave your

area.

Lab Schedule:

Each lab class will follow a similar schedule which includes a review of the equipment, demonstration, in class lab activities, practice time, and patient cases.

Punctuality is important in both the clinic and classroom. Students are expected to arrive to class on time for all synchronous and on-campus classes

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. Professionalism in an online environment is included. Additional feedback will be provided by peers, instructors, and teaching assistants.

The use of a lap-top computer for the purpose of note-taking or active-learning is allowed. Cell phones and all other devices are to be put away during class/lab time. If there is an extenuating circumstance for the need of monitoring a communication (text, email or phone call), approval from the course instructor is necessary in writing. Recording of any lab session is not permitted without prior written approval from the instructor.

Assessments: online and in person exam/quizzes/competencies are to be taken independently without the assistance of any resources. Online exams will use a proctoring service.

Communication Guidelines

Respectful communication and participation between peers and faculty are requirements and are encouraged within a professional program. Communication that is respectful should promote critical thinking, the furthering of dialogue, and benefit the learning experience regardless of the mode of delivery. Respectful communication is supported by preparation for the activity.

Academic Integrity

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.

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>

Online Faculty Course Evaluation Process

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-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>

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
