



INSTRUCTIONAL PACKAGE

PTH 202

Physical Therapy Modalities

Effective Term
Spring/2021

INSTRUCTIONAL PACKAGE

Part I: Course Information

Effective Term: 202020

COURSE PREFIX: PTH 202

COURSE TITLE: Physical Therapy Modalities

CONTACT HOURS: 6/week

CREDIT HOURS: 4 hours

RATIONALE FOR THE COURSE:

This course introduces clinical reasoning and steps to patient management, documentation, and clinical decision making with regard to the utilization of physical agents in patient care.

COURSE DESCRIPTION:

Introduces patient care techniques, including patient preparation for the application of superficial therapeutic hot/cold modalities, ultrasound, hydrotherapy, traction, compression, electrotherapeutics, laser, diathermy, and soft tissue mobilization. The student will engage in laboratory sessions associated with the didactic PTA courses that will allow the student the opportunity to demonstrate data collections and intervention skills by practice on classmates.

PREREQUISITES/CO-REQUISITES:

A grade of C or higher in all previous PTH courses.

REQUIRED MATERIALS:

- Physical Agents in Rehabilitation An Evidence-Based Approach to Practice Fifth Edition, Michelle H. Cameron, 2018
- Scrubs

Please visit the Bookstore online site for most current textbook information. Use the direct link below to find textbooks.

[BOOKSTORE](#).

Enter the semester, course prefix, number, and section when prompted, and you will be linked to the correct textbook.

ADDITIONAL REQUIREMENTS:

NA

April 2020

TECHNICAL REQUIREMENTS:

Access to Desire2Learn (D2L), HGTC's student portal for course materials.
WaveNet and D2L email access.

STUDENT IDENTIFICATION VERIFICATION

Students enrolled in online courses will be required to participate in a minimum of one (1) proctored assignment and/or one (1) virtual event to support student identification verification. Please refer to your Instructor Information Sheet for information regarding this requirement.

CLASSROOM ETIQUETTE:

As a matter of courtesy to other students and your professor, please turn off cell phones and other communication/entertainment devices before class begins. If you are monitoring for an emergency, please notify your professor prior to class and switch cell phone ringers to vibrate.

Part II: Student Learning Outcomes

PROGRAM LEARNING OUTCOMES

After successfully completing the Horry-Georgetown Technical College Physical Therapist Assistant Program, the graduate will be able to achieve the program's learning outcomes. The student is advised to view the program learning outcomes in the student clinical handbook. Reviewing the outcomes will assist the student in understanding how the terminal course objectives achieve the program's learning outcomes.
Use the direct link below to find the student clinical handbook.

[Handbook](#)

COURSE LEARNING OUTCOMES and ASSESSMENTS*:

After successful completion of this course, the student will be able to meet the following terminal behavior outcomes:

After successful completion of this course, the student will be able to meet the following terminal behavior outcomes that relate to each of the following physical agents, electrical modalities, and soft tissue mobilization:

- Biofeedback therapy (e.g., relaxation techniques, muscle reeducation, EMG)
- Electrical stimulation therapy (e.g., Iontophoresis, electrical muscle stimulation (EMS), TENS, functional electrical stimulation (FES))
- Cryotherapy procedures (e.g., cold pack, ice massage, vapocoolant spray, contrast baths)
- Ultrasound and Phonophoresis
- Diathermy
- Laser
- Thermotherapy (hot pack, paraffin)

- Intermittent pneumatic compression
 - Mechanical spinal traction
 - Soft tissue mobilization (e.g., connective tissue massage, therapeutic massage)
1. Review the medical and physical therapy documentation for a patient scenario and accurately explain the purpose and physiological effects, indications, precautions, and contraindications of physical therapy interventions.
 2. Select, implement, and modify treatment for a patient scenario within the parameters of the physical therapist plan of care.
 3. Proficient in teaching a home exercise or self-care program interventions and prevention strategies within the parameters of the physical therapist plan of care.
 4. Review the physical therapist plan of care for a patient scenario and perform appropriate data collection to assist the physical therapist in monitoring the effects of the intervention on a mock patient from a case scenario.
 5. Document a treatment accurately in SOAP note format for a patient scenario, including specific treatment parameters, application techniques, and treatment outcomes with correct billing for reimbursement.
 6. Acknowledge when the supervising physical therapist should be informed of a patient status change and when the need for clarification or assistance is needed to perform interventions or data collection.
 7. Be proficient in CPR and emergency response and recognize the need for referral for other emotional and psychological conditions beyond the scope of practice of physical therapy.
 8. Communicate adequately and appropriately, both verbally and non-verbally, in a manner that fosters confidence, and reflects an understanding of socioeconomic, cultural, and psychological differences.
 9. Acknowledge the scope of practice of a PTA in both legal and ethical dimensions; demonstrate professional behaviors by behaving honestly, tactfully, dependably, enthusiastically, cooperatively and industriously.
 10. Comply with safety and risk management strategies for self, patient, and facility.
 11. Demonstrate the ability to self-reflect on strengths and weaknesses for skill development.

STUDENT UNIT LEARNING OUTCOMES PER MODULE

Lecture & Lab Objectives: After successful completion of the classroom activity, the student will be able to meet the following instructional objectives:

*Modules can change per discretion of the instructor.

*Students – please refer to the Instructor’s Course Information sheet for specific information on assessments and due dates.

Module #1

Lecture & Lab

Materials Covered: Physical Agents in Rehabilitation & Lab handout

Assessment(s): Assignments & Lecture Test

- 1) Read and comprehend peer review article about a physical therapy physical agent, accurately summarize the information in writing, and correctly teach the information to other physical therapist assistant students.
- 2) Accurately explain the role of physical agents in rehabilitation to assist in healing.
- 3) Correctly explain the physiological process and phases of tissue healing (inflammation, proliferation, and maturation).
- 4) Describe the difference between the physiological process in acute and chronic inflammation.
- 5) Explain the formation of edema and explain the impact of edema on tissues.
- 6) Explain the cause of the pain-spasm cycle.
- 7) Differentiate acute, chronic, and referred pain.
- 8) Discuss the peripheral and central mechanisms of nociception and pain transmission.
- 9) Explain current theories of pain control.
- 10) Explain the use of physical agents for controlling pain.
- 11) Provide the rationale for monitoring vital signs to assess pain.

Lab

Materials Covered: Physical Agents in Rehabilitation and lab handout

Assessment(s): Assignments & Skill Checks

- 1) Review the mock physical therapist evaluation and correctly identify the sensory or pain impairments according to the evaluation.
- 2) Demonstrate appropriate superficial, deep, and combined assessment techniques following a demonstration by the instructor.
- 3) In a mock patient scenario accurately demonstrate appropriate pain assessment techniques to assist the physical therapist in monitoring the effects of treatment.
- 4) In a mock patient scenario, select the most appropriate sensory and or pain assessment techniques to meet the goals set by the PT within the parameters of the plan of care.
- 5) In a mock patient scenario, accurately document sensory and pain assessment accurately in SOAP note format, including specific treatment parameters, application techniques, and treatment outcomes.
- 6) In a mock patient scenario, complete a pain assessment while utilizing active listening skills in a patient lab case scenario.

Module #2

Lecture

Material (s) Covered: Physical Agents in Rehabilitation

Assessment(s): Assignments & Lecture Test

- 1) Accurately explain the purpose of cold & superficial thermal physical agents.
- 2) Accurately explain the physiological effects of cold & superficial thermal physical agents.
- 3) Correctly identify indications, contraindications, and precautions of cold & superficial thermal physical agents.
- 4) Acknowledge how a rehab aid could assist a physical therapist or physical therapist assistant with the application of superficial modalities.

Lab

Materials Covered: Physical Agents in Rehabilitation

Assessment(s):- Assignments & Skill Checks

- 1) Review a mock physical therapist evaluation and select the most appropriate cold & superficial thermal physical agent's techniques to meet the goals set by the PT within the parameters of the plan of care.
- 2) Prepare a mock patient and safely perform the most appropriate cold & superficial thermal physical agents as outlined in a plan of care.
- 3) Demonstrate appropriate assessment techniques to assist the physical therapist in monitoring the effects of cold & superficial thermal physical agents.
- 4) Educate a mock patient in safe and effective home use of cold & superficial thermal physical agents.
- 5) Document treatments accurately in SOAP note format, including specific treatment parameters, application techniques, and treatment outcomes for cold & superficial thermal physical agents.
- 6) Appropriately respond to a peer's privacy by performing appropriate draping during application of the

Module #3

Lecture

Materials Covered (s): Physical Agents in Rehabilitation

Assessment(s): Assignments & Lecture Test

- 1) Accurately explain the purpose of ultrasound and phonophoresis.
- 2) Accurately explain the physiological effects of ultrasound and phonophoresis.
- 3) Correctly identify indications, contraindications, and precautions of ultrasound and phonophoresis.

Lab

Material (s) Covered: Physical Agents in Rehabilitation

Assessment(s): Assignments & Skill Checks

- 1) Review a mock physical therapist evaluation and select the most appropriate ultrasound and phonophoresis technique to meet the goals set by the PT within the parameters of the plan of care.
- 2) Prepare a mock patient and safely perform the most appropriate ultrasound and phonophoresis, as outlined in a plan of care.

- 3) Demonstrate appropriate assessment techniques to assist the physical therapist in monitoring the effects of ultrasound and phonophoresis.
- 4) Document treatments accurately in SOAP note format, including specific treatment parameters, application techniques, and treatment outcomes for ultrasound and phonophoresis.

Module #4

Lecture

Material(s) Covered: Physical Agents in Rehabilitation

Assessment(s): Assignments & Lecture Test

- 1) Accurately explain the purpose of mechanical spinal traction.
- 2) Accurately explain the physiological effects of mechanical spinal traction.
- 3) Correctly identify indications, contraindications, physiological effects, and precautions of mechanical spinal traction.

Lab

Material(s) Covered: Physical Agents in Rehabilitation

Assessment(s): Assignments & Skill Checks

- 1) Review a mock physical therapist evaluation and select the most appropriate mechanical spinal traction technique to meet the goals set by the PT within the parameters of the plan of care.
- 2) Prepare a mock patient and safely perform appropriate mechanical spinal traction as outlined in a plan of care.
- 3) Demonstrate appropriate assessment techniques to assist the physical therapist in monitoring the effects of mechanical spinal traction.
- 4) Educate a mock patient in safe and effective home use of mechanical spinal traction.
- 5) Document treatments accurately in SOAP note format, including specific treatment parameters, application techniques, and treatment outcomes for mechanical spinal traction.

Module #5

Lecture

Material(s) Covered: Physical Agents in Rehabilitation

Assessment(s): Assignments & Lecture Test

- 1) Accurately explain the purpose of intermittent pneumatic compression.
- 2) Accurately explain the physiological effects of intermittent pneumatic compression.
- 2) Correctly identify indications, contraindications, physiological effects, and precautions of intermittent pneumatic compression.

Lab

Material (s) Covered: Physical Agents in Rehabilitation

Assessment(s): Assignments & Skill Checks

- 1) Prepare a mock patient and safely perform appropriate intermittent pneumatic compression as outlined in a plan of care.
- 2) Demonstrate appropriate assessment techniques to assist the physical therapist in monitoring the effects of intermittent pneumatic compression. I.e., Girth measurements and volumetric.
- 3) Educate a mock patient in safe and effective home use of intermittent pneumatic compression.

4) Document treatments accurately in SOAP note format, including specific treatment parameters, application techniques, and treatment outcomes for intermittent pneumatic compression.

5) Seek input from a peer or instructor on how to improve their explanation of the purpose and physiological effects of a modality to a peer in a lab case scenario.

Module #6

Lecture

Material(s) Covered: Physical Agents in Rehabilitation

Assessment(s): Assignments & Lecture Test

1) Accurately explain the purpose of diathermy.

2) Accurately explain the physiological effects of diathermy.

3) Correctly identify indications, contraindications, physiological effects, and precautions of diathermy.

Lab

Material (s) Covered: Physical Agents in Rehabilitation

Assessment(s): Assignments

1) Review a mock physical therapist evaluation and select the most appropriate type of diathermy to meet the goals set by the PT within the parameters of the plan of care.

2) Prepare a mock patient and safely perform appropriate diathermy therapy as outlined in a plan of care.

3) Demonstrate appropriate assessment techniques to assist the physical therapist in monitoring the effects of diathermy therapy.

4) Document treatments accurately in SOAP note format, including specific treatment parameters, application techniques, and treatment outcomes for diathermy.

Module #7

Lecture

Material(s) Covered: Physical Agents in Rehabilitation

Assessment(s): Assignments & Lecture Test

1) Accurately explain the purpose of laser.

2) Accurately explain the physiological effects of laser.

3) Correctly identify indications, contraindications, physiological effects, and precautions of laser.

Lab

Material (s) Covered: Physical Agents in Rehabilitation

Assessment(s): Assignments & Skill Check

1) Review a mock physical therapist evaluation and select the most appropriate type of laser to meet the goals set by the PT within the parameters of the plan of care.

2) Prepare a mock patient and safely perform appropriate laser therapy as outlined in a plan of care.

3) Demonstrate appropriate assessment techniques to assist the physical therapist in monitoring the effects of laser therapy.

4) Document treatments accurately in SOAP note format, including specific treatment

parameters, application techniques, and treatment outcomes for laser.

Module #8

Lecture

Material(s) Covered: Physical Agents in Rehabilitation

Assessment(s): Assignments & Lecture Test

- 1) Accurately explain the purpose of electrical stimulation therapy.
- 2) Accurately explain the physiological effects of stimulation therapy.
- 3) Correctly identify indications, contraindications, physiological effects, and precautions of electrical stimulation therapy.

Lab

Material(s) Covered: Physical Agents in Rehabilitation

Assessment(s): Assignments & Skill Checks

- 1) Review a mock physical therapy evaluation and select the most appropriate electrical stimulation therapy to meet the goals set by the PT within the parameters of the plan of care.
- 2) Prepare a mock patient and safely perform appropriate electrical stimulation therapy (Iontophoresis, Neuromuscular Electrical Stimulation, Interferential Current, Transcutaneous Electrical Stimulation) as outlined in a plan of care.
- 3) Demonstrate appropriate assessment techniques to assist the physical therapist in monitoring the effects of electrical stimulation therapy.
- 4) Educate patients in safe and effective home use of electrical stimulation therapy.
- 5) Document treatments accurately in SOAP note format, including specific treatment parameters, application techniques, and treatment outcomes for electrical stimulation therapy.

Module #9

Lecture and Lab

Materials Covered: Physical Agents in Rehabilitation and Supplemental Reading

Assessment(s): Assignments & Lecture Tests & Skill Checks

- 1) Accurately explain the purpose of biofeedback therapy.
- 2) Accurately explain the physiological effects of biofeedback therapy.
- 3) Correctly identify indications, contraindications, physiological effects, and precautions of biofeedback therapy.
- 4) Review a mock physical therapy evaluation and select the most appropriate biofeedback therapy to meet the goals set by the PT within the parameters of the plan of care.
- 5) Prepare a mock patient and safely perform appropriate biofeedback therapy as outlined in a plan of care.
- 6) Demonstrate appropriate assessment techniques to assist the physical therapist in monitoring the effects of biofeedback therapy.
- 7) Educate patients in safe and effective home use of biofeedback therapy.
- 8) Document treatments accurately in SOAP note format, including specific treatment parameters, application techniques, and treatment.

Module #10

Lecture and Lab

Materials Covered: Supplemental Reading

Assessments: Assignment and Lecture Test

- 1) Accurately define massage or soft tissue mobilization techniques and name the utilization of these techniques for therapeutic benefit.
- 2) Accurately define the effects and indications and contraindications to massage or soft tissue mobilization techniques.
- 3) Prepare a mock patient and employ massage or soft tissue mobilization techniques accurately to decrease edema, muscle spasm, and pain following a demonstration by the instructor.
- 4) Accurately perform superficial and deep massage or soft tissue mobilization techniques with appropriate intensity and duration to achieve established physical therapy plan of care goals following a demonstration by the instructor.

****Students – please refer to the Instructor’s Course Information sheet for specific information on assessments and due dates.***

Part III: Grading and Assessment

EVALUATION OF REQUIRED COURSE MEASURES/ARTIFACTS*

Students’ performance will be assessed and the weight associated with the various measures/artifacts are listed below.

EVALUATION*

Lecture Tests	60%
Assignments	5%
Skill Check Assessments	5%
Lab Practical Competency Exam	8%
Final Exam	20%
<u>Class Participation</u>	<u>2%</u>
Total	100%

****Students, for the specific number and type of evaluations, please refer to the Instructor’s Course Information Sheet.***

GRADING SYSTEM:

- A= 90%-100%
- B= 80%-89%
- C= 75%-79%
- D= 69%-74%
- F=below 68%

Grades earned in courses impact academic progression and financial aid status. Before withdrawing from a course, be sure to talk with your instructor and financial aid counselor about the implications of that course of action. Ds, Fs, Ws, WFs and Is also negatively impact academic progression and financial aid status.

The Add/Drop Period is the first 5 days of the semester for **full term** classes. Add/Drop periods are shorter for accelerated format courses. Please refer to the academic calendar for deadlines for add/drop ([ACADEMIC CALENDAR](#)). You must attend at least one meeting of all of your classes during that period. If you do not, you will be dropped from the course(s) and your Financial Aid will be reduced accordingly.

Part IV: Attendance

Horry-Georgetown Technical College maintains a general attendance policy requiring students to be present for a minimum of 80 percent (80%) of their classes in order to receive credit for any course. Due to the varied nature of courses taught at the college, some faculty may require up to 90 percent (90%) attendance. Pursuant to 34 Code of Federal Regulations 228.22 - Return to Title IV Funds, once a student has missed over 20% of the course or has missed two (2) consecutive weeks, the faculty is obligated to withdraw the student and a student may not be permitted to reenroll. **Instructors define absentee limits for their class at the beginning of each term; please refer to the Instructor Course Information Sheet.**

For online and hybrid courses, check your Instructor's Course Information Sheet for any required on-site meeting times. Please note, instructors may require tests to be taken at approved testing sites, if you use a testing center other than those provided by HGTC, the center may charge a fee for its services.

Part V: Student Resources



THE STUDENT SUCCESS AND TUTORING CENTER (SSTC):

The SSTC offers to all students the following **free** resources:

1. **Academic tutors** for most subject areas, **Writing Center support**, and **college success skills**.
2. Online **tutoring** and academic support resources.
3. Professional and interpersonal communication **coaching** in the EPIC Labs.

Visit the [Student Success & Tutoring Center](#) website for more information. To schedule tutoring appointments using TutorTrac, visit the Student Services tab in WaveNet. Email sstc@hgtc.edu or call SSTC Conway, 349-7872; SSTC Grand Strand, 477-2113; and SSTC Georgetown, 520-1455, or go to the [Online Resource Center](#) to access on-demand resources.



CENTRAL STUDENT INFORMATION CENTER: TECH Central

TECH Central offers to all students the following **free** resources:

1. **Getting around HGTC:** General information and guidance for enrollment!
2. Use the [Online Resource Center \(ORC\)](#) including scheduled technology training, Office 365 support, password resets, and username information.
3. **Drop-in technology support or scheduled training** in the Center or in class.
4. **In-person workshops, online tutorials and more services** are available.
5. **Chat with our staff on TECH Talk**, our live chat service. TECH Talk can be accessed on the student portal and on TECH Central's website, or by texting questions to (843) 375-8552.

Visit the [Tech Central](#) website for more information. Live Chat and Center locations are posted on the website. Or please call (843) 349 – TECH (8324).

STUDENT TESTING:

Testing in an **online/hybrid** course may be accomplished in a variety of ways:

- Test administered within D2L
- Test administered in writing on paper
- Test administered through Publisher Platforms

Further more tests may have time limits and/or require a proctor.

Proctoring can be accomplished either face-to-face at an approved site or online through RPNOW, our online proctoring service. To find out more about proctoring services, please visit the [Online Testing](#) section of the HGTC's Testing Center webpage.

The **Instructor Information Sheet** will have more details on test requirements for your course.

DISABILITY SERVICES:

HGTC is committed to providing an accessible environment for students with disabilities. Inquiries may be directed to HGTC's [Accessibility and Disability Service webpage](#). The Accessibility and Disability staff will review documentation of the student's disability and, in a confidential setting with the student, develop an educational accommodation plan.

Note: It is the student's responsibility to self-identify as needing accommodations and to provide acceptable documentation. After a student has self-identified and submitted documentation of a disability, accommodations may be determined, accepted, and provided.

STATEMENT OF EQUAL OPPORTUNITY/NON-DISCRIMINATION STATEMENT:

Horry-Georgetown Technical College prohibits discrimination and harassment, including sexual harassment and abuse, on the basis of race, color, sex, national or ethnic origin, age, religion, disability, marital or family status, veteran status, political ideas, sexual orientation, gender identity, or pregnancy, childbirth, or related medical conditions, including, but not limited to, lactation in

educational programs and/or activities.

TITLE IX REQUIREMENTS:

All students (as well as other persons) at Horry-Georgetown Technical College are protected by Title IX—regardless of their sex, sexual orientation, gender identity, part- or full-time status, disability, race, or national origin—in all aspects of educational programs and activities. Any student, or other member of the college community, who believes that he/she is or has been a victim of sexual harassment or sexual violence may file a report with the college’s Chief Student Services Officer, campus law enforcement, or with the college’s Title IX Coordinator, or designee.

*Faculty and Staff are required to report incidents to the Title IX Coordinators when involving students. The only HGTC employees exempt from mandatory reporting are licensed mental health professionals (only as part of their job description such as counseling services).

INQUIRIES REGARDING THE NON-DISCRIMINATION/TITLE IX POLICIES:

Student and prospective student inquiries concerning Section 504, Title II, and Title IX and their application to the College or any student decision may be directed to the Vice President for Student Affairs.

Dr. Melissa Batten, VP Student Affairs

Title IX Coordinator

Building 1100, Room 107A, Conway Campus

PO Box 261966, Conway, SC 29528-6066

843-349-5228

Melissa.Batten@hgtc.edu

Employee and applicant inquiries concerning Section 504, Title II, and Title IX and their application to the College may be directed to the Vice President for Human Resources.

Jacquelyne Snyder, VP Human Resources

EEO and Title IX Coordinator

Building 200, Room 212A, Conway Campus

PO Box 261966, Conway, SC 29528-6066

843-349-5212

Jacquelyne.Snyder@hgtc.edu