COURSE SYLLABUS
PTH 233b
PHYSICAL AGENTS II APPLICATION
1 credit hour / 2 contact hours lab

INSTRUCTOR:
Julie Davis, PT
CASA 114B
618-453-3618
jfrman@siu.edu

OFFICE HOURS:
M/W 10:00 am - 11:00 am
Friday 10:00 am – 2:00 pm
or by appointment

CLASS SCHEDULE:
Sec. 001 – Mon 1:00-2:50 pm
Sec. 002 – Wed 1:00-2:50 pm
Additional open lab times:
TBA
ASA 062

PREREQUISITES: PTH 107, 207, 123a & b
Co-Requisite PTH 233a.
Restricted to program

PREREQUISITE TO: PTH 234, PTH 321A, PTH 321B, PTH 322

TEXTBOOK:

COURSE CATALOG DESCRIPTION:
Students will be able to demonstrate the safe and appropriate application of: compression units, traction, electrical currents, electrical muscle stimulation and electrotherapy for pain and healing functions. Students will administer standardized questionnaires, graphs, behavioral scales or visual analog scales for pain.
COURSE OBJECTIVES:
Upon successful completion of this course, the student shall be able to successfully demonstrate the following skills and knowledge as measured practical examination and successful completion of all required check offs.

1. Describe the physiology of pain.
2. Describe the basic principles of electricity.
3. Correctly prepare the physical agents covered in this course to include
   - High Volt/Monophasic Pulsatile Current electrodes/indirect
   - Low Volt/ Biphasic Muscle Re-education
   - Low Volt/Monophasic Continuous point stimulation
   - Russian Stimulation
   - Functional Electrical Stimulation/NMES
   - Interferential/Pre-modulated Current
   - Ultrasound with Electrical Stimulation
   - TENS
   - Iontophoresis
   - Biofeedback
   - Cervical Traction
   - Pelvic Traction
   - Intermittent Compression

by:
   -- Identifying and correctly describing the physical agent’s characteristics, indications, contraindications and safety requirements.
4. Properly prepare the patient for treatment, including appropriate and comfortable positioning, proper draping, assessment of skin sensation and circulation and adequate explanation.
   -- Interact with patients/family in a manner that provides psychosocial support and recognizes cultural and socioeconomic differences.
5. Safely and correctly apply the physical agent by:
   a. Correctly identifying and manipulating all controls and switches
   b. Correctly performing all operations in correct sequence
   c. Establishing, monitoring, and varying the dosage according to patient tolerance and appropriate to the physical agent, the patient’s condition and treatment goals
   d. Describe and apply safety and comfort rules
   e. Describe, apply and manipulate the time, distance and intensity rules
   f. Recognize and respond to objective and/or subjective patient responses to the applied physical agent 100% of the time
6. Determine the need for modification of physical agent treatment by recognizing:
a. Changes in patient’s physical status, mental status and tolerance to treatment
b. Deviations from anticipated rate of progress
c. Objective indications of patient tolerance to treatment
d. All physiological, biomechanical, and psychological secondary effects of treatment
e. Responses to treatment

7. Determine the appropriate modification of ongoing physical agent treatment:
a. Determine whether appropriate modifications are within the limits specified in the treatment plan
b. Written and verbal communication with the therapist regarding modification and reason behind treatment modification
c. Correctly implement modification of treatment plan.

8. Demonstrate the ability to administer standardized pain assessments.

9. Demonstrates basic skills in measuring length and girth.

OUTLINE OF TOPICS OF LABORATORY EXPERIENCE:

<table>
<thead>
<tr>
<th>WEEK</th>
<th>TOPIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Review of Syllabus</td>
</tr>
<tr>
<td></td>
<td>Equipment Care</td>
</tr>
<tr>
<td>2</td>
<td>Positioning</td>
</tr>
<tr>
<td></td>
<td>Electrodes (size, shape…)</td>
</tr>
<tr>
<td>3</td>
<td>Holiday</td>
</tr>
<tr>
<td></td>
<td>TBA</td>
</tr>
<tr>
<td>4</td>
<td>TBA</td>
</tr>
<tr>
<td>5</td>
<td>Modulation</td>
</tr>
<tr>
<td>6</td>
<td>High Volt</td>
</tr>
<tr>
<td>7</td>
<td>IFC/Pre-Mod</td>
</tr>
<tr>
<td>8</td>
<td>Fall Break</td>
</tr>
<tr>
<td></td>
<td>Open Lab</td>
</tr>
<tr>
<td>9</td>
<td>TENS</td>
</tr>
<tr>
<td>10</td>
<td>Practical Exam</td>
</tr>
<tr>
<td></td>
<td>Point Stimulation</td>
</tr>
<tr>
<td></td>
<td>Russian/FES/NMES</td>
</tr>
<tr>
<td>12</td>
<td>Combo/Ionto</td>
</tr>
<tr>
<td>13</td>
<td>Holiday</td>
</tr>
<tr>
<td></td>
<td>Traction/Compression</td>
</tr>
<tr>
<td>14</td>
<td>Practical Exam (Section 002 TBD)</td>
</tr>
<tr>
<td>15</td>
<td>Open Lab</td>
</tr>
<tr>
<td>16</td>
<td>Open Lab</td>
</tr>
<tr>
<td>17</td>
<td>Final Practical Exam – Friday, December 18 at 12:30 pm</td>
</tr>
</tbody>
</table>
STUDENT EVALUATION:
This course is Pass/Fail. Students must obtain a minimum of 70% of the total points available to receive a grade of Pass.

<table>
<thead>
<tr>
<th></th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Practical Exams</td>
<td>100</td>
</tr>
<tr>
<td>Final Practical Exam</td>
<td>50</td>
</tr>
<tr>
<td>Check Offs</td>
<td>120</td>
</tr>
<tr>
<td><strong>Total Points</strong></td>
<td><strong>270</strong></td>
</tr>
</tbody>
</table>

Any student scoring less than 70% of the total possible points (less than 196 points) will be required to repeat the course. This course must be taken concurrently with 233a. Therefore, failure to achieve a passing grade in either 233a or 233b will result in the requirement to repeat BOTH courses. Student must complete the check-offs as described.

DESCRIPTION OF TEACHING METHODS AND LEARNING EXPERIENCES:

This course is taught in a laboratory format. Students will be provided with hands-on laboratory experiences including demonstration and patient simulation to supplement lecture material presented in PTH 233a.

Lab/Class Participation
The student is expected to arrive to class on time, bring required materials and be prepared for subject matter. Lab requirements include hands on demonstration of learned skills; students must be prepared with proper attire and materials. Lab attire is loose fitting shorts, tank tops or loose fitting short sleeve T-shirts. Students are expected to make full use of lab time. When not engaged in formal laboratory instruction, students are expected to practice skills and complete check offs. Additional static open lab time will be arranged.

This course requires student to student and student to instructor contact. Please notify your instructor of any difficulties or issues.

Check Offs - 120 points
The student must complete and pass a practical examination of skills for each modality covered in this class. Check-offs may be performed during laboratory or open laboratory time. Prior to completing the check off, the student must practice the skills involved, know the indications/contraindications and be prepared to answer questions regarding the treatment including procedures to modify the treatment. While completing a check off, the student may be given a maximum of one indirect verbal cue to satisfactorily complete one step of the check off. If the student is not able to correctly complete the step involved or answer the question presented to him/her in regard to the modality following the verbal cue, or requires an additional verbal cue to complete a different step or answer another question in the same check off, the check off attempt will be considered unsuccessful and the student will be required to repeat the check off. Each check off is
worth 10 points. To receive the maximal points, check offs must be completed according to the following schedule:

- Week 10 - High volt, IFC, Pre-mod, TENS
- Week 14 - Russian, NMES/FES, point stimulation, combo
- Week 17 – Ionto, Traction, compression

Check offs must be completed by the due date to receive 10 points. Those completed after the due date will receive 0 points. Each student must satisfactorily complete every required check-off, even in no points are assigned, in order to take the final practical exam.

**Practical Examination- 2 @ 50 points each**
Each student individually will be asked to perform a modality at random from those covered on the most recent written examination in 233a. A minimum of 70% of the total points must be received to pass the practical exam. Each student will be allowed a maximum of 2 attempts to pass the practical examination. Students must pass each practical examination with a minimum of 70% in order to successfully complete the course.

**Final Practical Exam– 50 points**
Each student individually will be asked to perform a modality at random from those covered in the course. A minimum of 70% of the total points must be received to pass the final practical examination. Each student will be allowed a maximum of 2 attempts to pass the practical examination. Students must pass the practical examination with a minimum of 70% in order to successfully complete the course.

**Professional Behavior** - The development of professional behaviors is essential to any aspiring health care professional. One realm of professional behavior lies in the expectation of the person to be punctual, prepared and present.

**Student Grades/Confidentiality** – No information regarding student grades or class progress will be communicated via telephone or email. All grades will be posted on Desire2Learn as soon as they are available. If you have questions regarding current course grades or course information, students must speak directly with the instructor. This may be possible either immediately before or after class, during office hours or by making an appointment to meet with the instructor.

**Classroom Attendance Policy** – This is a professional program. Attendance in class is expected, but is the responsibility of the student. Students should be prepared to participate in class at the designated start time for the course. Prepared means the student is seated in the class with all necessary classroom supplies available to them and assignments due that day are turned in to the instructor. The University Policy on Accommodating Religious Students may be found in the 2015-2016 Undergraduate Catalog, p. 565.

**Academic Dishonesty** - Each student is responsible for making himself/herself aware of the policies and procedures in the Student Conduct Code that pertain to Acts of Academic
Dishonesty. These policies cover such acts as plagiarism, preparing work for another student, cheating by any method or means, falsifying or manufacturing data, furnishing false information to a university official relative to academic matters, and solicitation, aiding, concealing, or attempting conduct in violation of this code. See the Morris Library Guide on Plagiarism (http://libguides.lib.siu.edu/plagiarism).

Disruptive Behavior Policies – As with any public forum, the classroom is a shared space where consideration and compassion for others are not negotiable. To learn the interpersonal and professional skills offered in the course requires that, as with a sport or any instrument, we practice them daily. A positive attitude, a willingness to listen and learn, and an embrace of differences as well as similarities…these are just a few of the dynamics we will strive to practice.

Sexual harassment, either verbal or physical, will not be tolerated in this class, this program, or at Southern Illinois University Carbondale. Students engaged in harassing behavior will be removed from the program immediately.

SIU contains people from all walks of life, from many different cultures and sub-cultures, and representing all strata of society, nationalities, ethnicities, lifestyles, and affiliations. Learning from and working with people who differ from you is an important part of your education in this class, as well as an essential preparation for your career.

Electronic Devices- The use of electronic devices, such as cell phones, will not be permitted in the classroom. All electronic devices should be TURNED OFF when entering the classroom. In the case of an emergency, persons may call the School of Allied Health office at (618) 453-7211 and a message will be delivered to the classroom.

SIU Emergency Procedures - Southern Illinois University Carbondale is committed to providing a safe and healthy environment for study and work. Because some health and safety circumstances are beyond our control, we ask that you become familiar with the SIUC Emergency Response Plan and Building Emergency Response Team (BERT) program. Emergency response information is available on posters in buildings on campus and the Emergency Response Guideline pamphlet. It is also available on BERT’S website at http://www.bert.siu.edu/ and on the Department of Safety's website www.dps.siu.edu.

Instructors will provide guidance and direction to students in the classroom in the event of an emergency affecting your location. It is important that you follow these instructions and stay with your instructor during an evacuation or sheltering emergency. The Building Emergency Response Team will provide assistance to your instructor in evacuating the building or sheltering within the facility.

Supplementary Assistance – With the cooperation of SIU’s Disability Support Services (DSS), each student who qualifies for reasonable supplementary assistance has the right to receive it. Students requesting supplementary assistance must first register with DSS in Woody Hall B-150, (453-5738) or http://disabilityservices.siu.edu/.
Notice: If you have any type of special need(s) or disability for which you require accommodations to promote your learning in this class, please contact the instructor as soon as possible. The Office of Disability Support Services (DSS) offers various support services and can help you with special accommodations. You may wish to contact DSS at 453-5738 or go to Room 150 in Woody Hall to verify your eligibility and options for accommodations related to your special need(s) or disability.

Saluki Cares – The purpose of Saluki Cares is to develop, facilitate and coordinate a university-wide program of care and support for students in any type of distress—physical, emotional, financial, or personal. By working closely with faculty, staff, students and their families, SIU will continue to display a culture of care and demonstrate to our students and their families that they are an important part of the community. You may contact Saluki Cares at (618) 453-5714 or siucares@siu.edu.

SIU PTA course materials, including the course syllabus are not to be duplicated without consent of the SIU PTA Program.