1. **PhTh 7120 - INTERVENTION II: THERAPEUTIC EXERCISE - FOUNDATION AND PRINCIPLES**

   Fall Semester 2019 (4 Credit Hours)

   **Course Coordinator:** Ed Gappmaier, PT, PhD
   **Instructors:** Ed Gappmaier, PT, PhD, Reva Rauk, PT, PhD, Lloyd Mayer, DPT, Lee Skinner, DPT, Nicole Pappas, DPT, Lance Barton, DPT, et al.

   This means: you will be exposed to different treatment approaches, philosophies and opinions. Welcome to the real world of PT.

   **Our teaching philosophy** (stolen from anonymous):
   “The great end of education is to discipline rather than to furnish the mind; to train it to the use of its own powers, rather than fill it with the accumulation of others.”

   In other words: true learning means you have to earn it to own it.

2. **Prerequisites:** Admission to Physical Therapy Program and program prerequisite courses, PhTh 6040 Anatomy, PhTh 6060 Pathophysiology, PhTh 6080 Pathokinesiology, PhTh 7070 Tests and Measures.

   This means: we build on the knowledge you acquired in your previous courses and you are expected to remember (or review) information learned in these courses.

3. **Course Description:** Knowledge of exercise principles based on physiologic mechanisms of movement essential for treatment planning and implementation. This course is inclusive of all basic approaches to exercise for improvement of range of motion, strength, aerobic and functional capacity.

4. **Student Learning Outcomes:**

   You will acquire the knowledge and skills to:
   4.1 design effective exercise programs to achieve treatment goals established through patient evaluations based on current theories and research evidence.
   4.2 evaluate effectiveness of exercise programs and safely and effectively progress treatment programs.
   4.3 understand the contributions to normal range of motion including specific joint mobility, muscle length, active and passive muscle tone and apply this knowledge to specific clinical problems.
   4.4 apply knowledge of anatomical and physiological factors contributing to muscle force generation to design effective resistance training programs for specific clinical problems.
   4.5 apply knowledge of physiological factors contributing to functional work capacity to design effective conditioning programs for specific clinical populations.
   4.6 be prepared to competently utilize rehabilitation equipment including proper set-up, adjustment and safe and effective technique.
   4.7 establish a safe and effective plan of care in collaboration with appropriate stakeholders, including patients/clients, family members, payors, other professionals and other appropriate individuals.
   4.8 become a committed, passionate role model for active living to enhance health and wellness.

5. **Course Concepts:**

   5.1 Exercise is the primary means for therapists to address patient problems and improve patient function.
   5.2 The information presented in this course will help you to integrate knowledge of anatomy, physiology, and kinesiology to appropriately design treatment protocols for any patient population and will provide you with the knowledge and skills necessary to be competent in the utilization of exercise as a therapeutic modality.

   This means: in this course we want you to gain a foundation, an understanding of basic principles, the ability to integrate and apply “general” knowledge to design appropriate and effective therapeutic exercises for any clinical problem.

   This also means: in this course we will not hand you “cookbook recipes” or exercise lists for specific clinical problems such as exercises after total hip replacement or rotator cuff surgery etc. etc. etc. etc. etc.
6. **Textbooks & Reference Materials**
   6.1 **Required**

   6.2 **Reference Texts**
   Kraemer, Fleck, Deschenes, Exercise physiology (2nd ed), LWW, 2015.

7. **Teaching and Learning Methods**
   7.1 Assigned Reading
   7.2 Class Discussion
   7.3 Lecture
   7.4 Demonstration
   7.5 Laboratory Experience
   7.6 Clinical Experience
   7.7 Group Assignment
   7.8 Quizzes
   7.9 Practical Examination
   7.10 Written Examination

**Proposed learning process:**
- Download/print unit reading assignment and objectives
- Read assigned materials and “link” information with objectives
- Participate in class discussion, clarify unclear concepts (=ask questions) and “fill in holes” in your unit “objective/information document”
- Review unit content after each class and lab period

⇒ honing of critical-thinking and problem-solving skills, good grade

**Discouraged learning method:**
- **Come to class unprepared**
- **Try to memorize powerpoint slides before exams**

⇒ frustration, unsatisfactory grade

Always bring your calculator and textbooks to class and calculator to exams!!

8. **Course Schedule and Topic Outline:**
   see document “7120-schedule 2019” posted on CANVAS (vs. “Canvas Calendar” which may not be complete)

9. **Exercise Physiology Pretest, Fitness Testing Exam, Aerobic Exercise Exam:** The knowledge and skills to evaluate a client’s physical work capacity and prescribe an appropriate general physical conditioning program are essential to address impairments in aerobic endurance and to enhance fitness and wellness. These knowledge and skills, which you should have acquired through your prerequisite courses, are also an important foundation of physical therapy exercise management of persons with chronic disease (PHTH 7290 Cardiopulmonary Management and other clinical courses). To demonstrate essential basic knowledge and skills in this area, you need to pass the above listed examinations. Several optional review sessions of this content will be offered as listed on the class schedule. Please see more specific instructions on Canvas.
10. **Patient Case Class Discussions** [further instructions will be posted with cases on CANVAS]:
Based on a patient case study you will develop a comprehensive treatment plan and protocols for each treatment session and treatment progression including home programs. You will be prepared to discuss and demonstrate your treatment ideas including the rationale for your choices during class discussions (students will be called from a random order class list to participate). Please submit your plan of care and HEP handouts by the deadlines noted in CANVAS. While grading will be based on your individual submissions, you are encouraged to work in small groups on these assignments.

11. **Half day clinical experiences:**
Once during the semester you will have the opportunity for a half-day clinical experience at the University of Utah Skaggs Wellness Center. These are held Tuesdays and Thursdays from 1:30 to 4:30 PM and Fridays from 8:00 to 11:00 AM. Your clinical supervisor is Ellen Maxfield (<ellen.maxfield@utah.edu>, 801-213-8720). Please check in at the front desk when you arrive at the facility. Within 2 school days of your experience submit a brief written report of your experience through Canvas. Include: 1) Summarize what you learned from your conversations with individual program participants. 2) What else did you gain from this experience?  
**Please come dressed in professional attire and wear your name tag!**

12. **Grading Policy**
Your grade will be determined on the basis of the following components:

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
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<tbody>
<tr>
<td>Midterm 1 (written)</td>
<td>15</td>
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<tr>
<td>Exercise Physiology Pretest</td>
<td>5</td>
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<tr>
<td>Fitness Testing Exam (practical)</td>
<td>5</td>
</tr>
<tr>
<td>Aerobic Exercise Exam (written)</td>
<td>15</td>
</tr>
<tr>
<td>PNF-Examination (written/practical)</td>
<td>15</td>
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<tr>
<td>Written Final Examination</td>
<td>15</td>
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<tr>
<td>Practical Final Examination</td>
<td>15</td>
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<tr>
<td>Lab and class assignments, quizzes, clin exp. case studies etc.</td>
<td>15</td>
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<tr>
<td>Participation Points</td>
<td>bonus</td>
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<tr>
<td>Total points possible</td>
<td>100+</td>
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Your final score will be multiplied by a class participation/generic abilities factor:

1.0 Active participation and regular attendance in class. Appropriate professional behavior in class, labs and clinic.

0.9 Frequently late to class or repeatedly leaves class early. Unauthorized lab changes. Occasional unexcused absences. Seldom contributes to class discussion. At times lacks appropriate professional behavior.

0.8 Multiple unexcused absences. Little if any contribution to class discussion. Inappropriate or non-professional activities in class, lab or clinic.

Individual scores and grades will be available on CANVAS.

Lab attendance is crucial for acquisition of practical and clinical problem-solving skills. Excused absences need to be timely! Unexcused absences will result in a low generic abilities score. Absences due to scheduling of conflicting academic activities during lab times by students (i.e. service learning projects) are not acceptable and will not be excused!

**Lab attire for all lab sessions unless otherwise noted include T-shirt, shorts and exercise shoes.**

** A minimum of 70% is required on all written and practical examinations to pass the course! **

Students earning a score below 70% will be given the opportunity of one retake exam for a failed test. Students who fail a retake exam or fail more than two exams in this course will receive a letter grade “C-” independent of total points/percent earned through other class assignments or examinations.

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<thead>
<tr>
<th>Grade</th>
<th>Range</th>
<th>Percent</th>
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<tbody>
<tr>
<td>A</td>
<td>94-100</td>
<td>percent</td>
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<tr>
<td>A-</td>
<td>90-93.99</td>
<td>percent</td>
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<tr>
<td>B+</td>
<td>86-8999</td>
<td>percent</td>
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<tr>
<td>B</td>
<td>82-85.99</td>
<td>percent</td>
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</table>
B-  78-81.99 percent
C+  74-77.99 percent
C   70-73.99 percent
C-  66-69.99 percent
D   >66 percent

13. Office Location/Hours:
12.1 Office location: HPEB Room 118A
12.2 Office hours by appointment (E-mail or call 581-3424 for scheduling).
12.3 E-mail: Ed.Gappmaier@hsc.utah.edu

14. University drop and withdrawal information:
Last day to add, drop (delete) classes: Friday, August 30, 2019
Last day to withdraw from classes: Friday, October 18, 2019

15. All students are expected to maintain professional behavior in the classroom setting, according to the Code of Student Rights and Responsibilities. The code is provided in detail on the University of Utah web page (www.admin.utah.edu/ppmanual/8/8-10.html). The code specifies student rights as well as conduct involving cheating, plagiarism, collusion, fraud, theft, etc. Plagiarism and cheating are serious offenses and may be punished by failure on the exam or project, failure in the course, and/or expulsion from the University. Students are expected to conduct themselves in accordance with the University of Utah’s CODE OF STUDENT RIGHTS AND RESPONSIBILITIES. The code is provided in detail on the University of Utah web page (www.admin.utah.edu/ppmanual/8/8-10.html). To confirm a mutual understanding of specific expectations in this course students shall submit a signed copy of the PHTH 7290 Code of Professional Behavior (see next page) by Friday, August 23, 2019 (PDF submission through Canvas).

16. Statement of equal access: The University of Utah and the Department of Physical Therapy seeks to provide equal access to its programs, services, and activities for people with disabilities. If you will need accommodations in the class, reasonable prior notice needs to be given to the Center for Disability Services, 162 Olpin Union Building, 581-5020 (V/TDD), Center for Disability Services (http://disability.utah.edu/). CDS will work with you and the instructor to make arrangements for accommodations. All written information in this course can be made available in alternative format with prior notification to the Center for Disability Services.

17. Addressing sexual misconduct: Title IX makes it clear that violence and harassment based on sex and gender (which includes sexual orientation and gender identity/expression) is a Civil Rights offense subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, color, religion, age, status of a person with a disability, veteran’s status, or genetic information. If you or someone you know has been harassed or assaulted, you are encouraged to report it to the Title IX Coordinator in the Office of Equal Opportunity and Affirmative Action, 135 Park Building, 801-581-8365, or the Office of the Dean of Students, 270 Union Building, 801-581-7066. For support and confidential consultation, contact the Center for Student Wellness, 426 SSB, 801-581-7776. To report to the police, contact the Department of Public Safety, 801-581-2677(COPS).

18. University Safety Statement: The University of Utah values the safety of all campus community members. To report suspicious activity or to request a courtesy escort, call campus police at 801-585-COPS (801-585-2677). You will receive important emergency alerts and safety messages regarding campus safety via text message. For more information regarding safety and to view available training resources, including helpful videos, visit safeu.utah.edu.
PH TH 7120 – Code of Professional Behavior

Electronic Devices

I will limit my activities on my laptop computer/tablet to matters directly related to the current class discussion during class times. I will not allow myself or others to be distracted by surfing the web, interacting with “social networks” or working on class assignments not related to the current class discussion.

I will turn off my cell phone during class and lab times unless I have to be “on call” for a possible emergency – in that case my phone will be set to vibrate. I will not engage in texting during class/lab time unless I have to respond to a true emergency which absolutely cannot wait until after class.

Labs

I will attend my assigned lab session unless I switched lab times with another class member or I received prior authorization by course/ lab instructor.

I will wear lab clothing (shorts, T-shirt, exercise shoes) for all labs unless instructed otherwise by course/lab instructor.

I pledge to comply with these policies and behaviors.

_____________________________________________________________________________  ________________
Student Signature                              Date

_____________________________________________________________________________
Print Name