

**University of Florida**  
**College of Public Health and Health Professions, Department of Physical Therapy**  
**PHT 6352. Pharmacology in Physical Therapy Practice**

**Summer 2014 Credit Hours:** Three (3)

**Instructor:** Cathy S. Paterson, Ph.D.  
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**Course Description:** This course covers basic pharmacology and its relevance to the practice of physical therapy. Major classes of drugs are covered, including those to treat autonomic, cardiovascular, central nervous system, musculoskeletal, and endocrine disorders. Case examples are used to illustrate the interactions of medications and therapy.

**Required Textbook:**

Pharmacology in Rehabilitation. Ciccone. 2007. Fourth edition. F.A. Davis, Philadelphia. 2002. ISBN: 0-8036-1377-6

**Recommended Textbook:**

ACSM's Guidelines for Exercise Testing and Prescription. Seventh Edition. Lippincott, Williams and Wilkins. Philadelphia. 2006. ISBN: 0-7817-4590-X

**Examinations and Grading:** This course will contain 2 exams worth 100 points each. You will also have 4 quizzes worth 25 points each for a total of 100 points. You will have one assignment that will not be graded, but is mandatory in order to fully understand the material. The assignment will be discussed in class on the completion due date.

**Terminal Behavior Objectives:**

At the completion of this course, the student should have the following abilities:

Describe the basis of drug action including:

- drug development
- receptor binding
- dose/response relationships
- relative measures of drug safety
- receptor regulation
- drug administration
- drug distribution
- drug metabolism

- drug excretion
  - the impacts of therapy on a patient's responses to medications
2. Identify normal autonomic responses to activity and rest and predict altered responses in pathological conditions and with medication
  3. Given a case scenario of a patient with a cardiovascular disorder, the student will:
    - formulate a hypothesis of expected signs and symptoms
    - differentiate between pathological responses and those due to medications
    - describe the basic mechanisms of action and side effects of medications
  4. Given a case scenario of a patient with neurological dysfunction, the student will:
    - Distinguish between a variety of neurological conditions based on use of all available signs and symptoms, including medications
    - Predict a patient's side effects based on the classes of medications prescribed
    - Explain the basic mechanisms of action of medications prescribed
  5. Given a case scenario of a patient with musculoskeletal dysfunction and/or pain, the student will:
    - Describe the basic mechanisms of action and side effects of medications prescribed
    - Predict how medications taken for pain and inflammation may affect the healing process
  6. Discuss the basic endocrine pathologies and the medications used to treat

**Course Schedule:**

Topic	Wk	Chapters
Principles of Drug Action	1	1,4
Pharmacokinetics	2	2-3
Autonomic Pharmacology	3	18-20
Quiz 1		
ANS, Intro to Cardiovascular-	4	21-23
Cardiovascular Pharmacology	5	24-25
Quiz 2		
<b>Midterm Exam (Through CV pharm)</b>	6	1-3, 18-25
Intro to CNS, psych disorders	7	5-8
Movement disorders, skeletal muscle	8	10,13
Anesthetics, antiseizure	9	11,12
Quiz 3		

Pain and Inflammation	10	14-17
GI, respiratory, Endocrine disorders	11	26 - 32
Quiz 4		
<b>Final Exam (CNS through endocrine)</b>	12	5-8,10-17;26-33;

***GRADING SCALE:***

This course will utilize the approved grading scale for the University of Florida, Department of Physical Therapy.

Notes: Read the book. It is an easy read and informative.