

## **PHT 6302C: Principles of Disease**

Department of Physical Therapy, College of Public Health and Health Professions  
Fall Semester, 2013

**Credits:** 3

**Class Schedule:**

Room 1104

Tuesday: 2:00-3:50 p.m. – Pathology Lecture

Friday: 9:00-12:00 a.m. – Acute Care Lecture/Labs

**\*There are exceptions!** Please see [Smith and Derrico Schedules](#).

**Instructors:**

David Derrico, MSN, RN

Assistant Clinical Professor

HPNP 3202

Office hours: After class Tuesday, and by appt.

Office 352-273-6341 Cell 352-562-6305

Barbara K. Smith, PT, PhD

Research Assistant Professor

CTRB 2222

Office hours: After class Tuesday or Friday, and by appt.

Office phone: 294-5315

Email: [bksmith@php.ufl.edu](mailto:bksmith@php.ufl.edu)

**Course Description:** The primary goal of this course is to prepare you to recognize the impact of primary systemic diseases on your patients, and how the presence of these disease states will affect your clinical decision-making. We will review the underlying pathology and clinical manifestations of the more common disorders of each system, and discuss their relevance during physical therapy evaluation and intervention. The role of the PT in risk factor reduction and prevention of disease will also be addressed.

**Instructional Methods:**

We will use lecture, knowledge self-assessments, journal article readings, class discussion, laboratory practice, and cases. In lab sessions, real cases will be presented and applied to the pathologies covered in lecture. Clinical problem solving strategies will be applied and practiced. Role playing will be used to further develop clinical decision-making skills as well as to promote advanced communication skills.

Our expectation is that you will be prepared for class. This includes completing readings prior to class so that you will be able to contribute to class discussions and case studies.

**Required Texts:**

- 1) Huether, S. & McCance, K. (2012). **Understanding Pathophysiology, (5<sup>th</sup> ed.)**. St.Louis: Mosby/Elsevier.
- 2) Malone, D. & Bishop, K. (2006). **Physical Therapy in Acute Care: A Clinician's Guide**. SLACK, Inc.

**Website:**

We will use the **Sakai** e-learning system, which can be accessed at the following link:  
<https://lss.at.ufl.edu>

Lecture notes, laboratory assignments, readings, announcements, grades, etc., will be located here.

Please check the website prior to attending class on Tuesday & Friday.

**Grading Criteria:****Grading Scale:**

Grade Scale	Letter Grade	Grade Point Average
93-100	A	4.00
90-92	A-	3.67
87-89	B+	3.33
83-86	B	3.00
80-82	B-	2.67
70-79	C	2.00
60-69	D	1.00
<60	E	0.00

**Summary of Grading:**

Test 1	20%
Test 2	20%
Test 3	20%
Test 4	20%
Quizzes	<u>20%</u>
	100%

*\*In addition to your point average, you are expected to complete all homework assignments to receive full points.*

**Time Management:**

For your scheduling purposes, dedicate **4-6 hours/week** for your readings and assignments.

You will always have 1 week to prepare for the next class.

### **Written Exams:**

Four written exams are scheduled. The exams will cover reading assignments, class lectures/discussions, on-line tutorials, homework assignments and labs. Grading will follow the grading scale in the Handbook. The exams are designed to evaluate your decision-making abilities while having mastery of the content.

### **How Should I Study for this Class?**

1. Read the assignments before class. This will put you in a position to comfortably be involved in class discussion and problem solving of case studies presented in lab.
2. For each disease that we cover absolutely know the underlying pathophysiology, signs and symptoms, and the **specific** implications these have on your clinical approach as a physical therapist.
3. Be able to address written objectives for each class and reading.

And **most importantly**,

our goal, and the goal of this course, is to have you do well and enjoy learning. If you have any concerns or problems, please speak with either of us (the earlier in the course the better!) and we will come up with a way for you to make the most of this course.

## **PHYSICAL THERAPY PROGRAM POLICIES FOR ALL COURSES**

**Attendance** is expected for all class sessions, labs, and examinations. The Physical Therapy Program at the University of Florida strongly believes that professional behavior patterns begin during the student's academic preparation. According to the PT Student Handbook, students are expected to notify the department by phone (273-6085) in the event of unexpected absence from a scheduled class session. Students are expected to inform the instructor of planned absences at least two days in advance.

**Policy for Make up Work:** Students who miss a class/clinic visit because of an emergency or excused absence should make arrangements with the instructors to complete missed exams or assignments and with fellow students to obtain class notes/hand-outs or to gain information about lab activities. If the absence was unexcused, no opportunity will be given to complete the missed exams or assignments.

**Punctuality** is important in both the clinic and classroom. Students are expected to arrive to class on time (i.e. prior to the instructor initiating class) and to return from breaks on time. The clock in the classroom will be considered the "official" clock. You are encouraged to notify your instructor(s) when appointments/ unavoidable commitments will cause arrival to class after start time, or require you to leave early. It is also the responsibility of the instructor to begin and end class at agreed upon times, and to notify you when changes of schedule may occur.

**Course Accommodations:**

If for any reason you feel you will have difficulty meeting the objectives and expectations of this course, please register with the Dean of Students Office. Individuals who require reasonable accommodations must contact the Dean of Students Office, 202 Peabody Hall, phone: 392-1261, as soon as possible. This office will provide necessary documentation. The student who is requesting accommodation must then provide this documentation to the instructor.

**Professional Behavior:**

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 behavior into each academic course.

Professional Behavior is described in the Student Handbook and is exemplified by:

1. attendance to all classes and labs,
2. timeliness,
3. attentiveness,
4. respectful and polite interaction with peers, instructors, and patients,
5. active learning as demonstrated by questions and discussion,
6. active participation in lab activities,
7. responsibility shown for maintenance, organization, and cleanliness of lab equipment and facilities,
8. leads and/or contributes to lab preparation and clean-up, as requested.
9. and others as described on Professional Behaviors and Student Responsibilities in the Student manual.
10. Laptop Use - Students are permitted to use personal laptops for this class. We reserve the right to prohibit your laptop use during class time if content becomes disruptive to your instructor or classmates, or, if you are using your laptop for activities unrelated to the ongoing class. Laptop use that is not acceptable during class include: use of instant messaging, chat rooms, games, surfing the net, etc. Acceptable uses include taking notes, accessing course-related documents (on or off line), following along with power point documents or class demonstrations, course-related internet searches, and performing class projects.
11. Eating during class: Eating is allowed during the breaks, but not during class. Drinking during class is allowed.

**Academic Honesty / Honor Code**

The University of Florida Honor code was voted on and passed by the Student body in the Fall 1995 semester. Per the University of Florida Department of Physical Therapy student handbook, students are required to abide by the UF Academic Honesty Guidelines. Cheating, lying, misrepresentation, or plagiarism in any form is unacceptable and inexcusable behavior. The following pledge has been accepted by the University and is expected of all students:

## The Honor Code reads as follows:

Preamble: In adopting this Honor Code, the students of the University of Florida recognize that Academic honesty and integrity are fundamental values of the University community. Students who enroll at the University commit to holding themselves and their peers to the high standard of honor required by the Honor Code. Any individual who becomes aware of a violation of the Honor Code is bound by honor to take corrective action. A student-run Honor Court and faculty support Are crucial to the success of the Honor Code. The quality of a University of Florida education is Dependent upon the community acceptance and enforcement of the Honor Code.

The Honor Code: We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity. On all work submitted for credit by students 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.”

In this professional program we are particularly sensitive to students submitting independent work and to using complete and accurate referencing in complying with the University of Florida Rules – 6CI-4.017 Student Affairs: Academic Honesty Guidelines. Academic misconduct refers to dishonesty, knowingly furnishing false information to the University, plagiarism (e.g., presenting the ideas of someone else or the writing of someone else as one’s own work), or cheating of any kind. All written assignments are to be completed independently by each student.

\*Further details regarding UF’s honesty policy are in your student handbook.

## This course can be failed in any one of the following three ways:

- 1) Your final grade point average is below 70.
- 2) You cheat.
- 3) Your behavior is unbecoming of a professional physical therapist.

## Counseling and Student Health

Students may occasionally have personal issues that arise in the course of pursuing higher education or that may interfere with their academic performance. If you find yourself facing problems affecting your coursework, you are encouraged to talk with an instructor and to seek confidential assistance at the University of Florida Counseling Center, 352-392-1575, or Student Mental Health Services, 352-392-1171. Visit their web sites for more information:

<http://www.counsel.ufl.edu/> or <http://www.health.ufl.edu/shcc/smhs/index.htm#urgent>

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, including primary care, women's health care, immunizations, mental health care, and pharmacy 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: [www.health.ufl.edu/shcc](http://www.health.ufl.edu/shcc)

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.*

## **COURSE OBJECTIVES**

Upon completion of this course, the student will:

1. Utilize principles from the biological sciences to understand pathophysiological processes across the lifespan.
2. Explain relationships among pathophysiological processes, laboratory and diagnostic tests, and clinical manifestations of selected illnesses.
3. Distinguish differences between developmental physiological alterations and pathophysiological processes.
4. Recognize, identify, and analyze signs, symptoms, and pain patterns associated with various systems of the body and the implications thereof, including identification of whether physical therapy is indicated or whether a client requires referral to appropriate healthcare practitioner.
5. Evaluate journal articles regarding physical therapy practice, research, and education related to pathological disorders.
6. Verbalize or write a logical and appropriate line of questions for client assessment to obtain a history and to establish a working diagnosis.
7. Conduct an effective interview with mock patients resulting in the identification of the source of their clinical problem(s).
8. Modify performance of physical therapy examination and intervention either in a role playing situation or in a written case discussion based on recognition and incorporation of client individual and cultural differences.
9. Recognize and list signs and symptoms of emergency medical conditions and describe intervention including procedures for obtaining appropriate medical assistance.
10. Identify and differentiate between the clinical patterns associated with the following disorders

- a. \*cardiovascular conditions
- b. \*pulmonary conditions
- c. \*neurologic
- d. hematologic disorders
- e. gastrointestinal disorders
- f. renal or urologic disorders
- g. hepatic and biliary disorders
- h. endocrine and metabolic disorders
- i. metabolic bone diseases
- j. neuromusculoskeletal disorders
- k. immunologic disorders
- l. dermatologic disorders
- m. cancer

11. For the above disorders, describe the appropriate type of intervention ( including necessary modifications and procedures for referral to, and assistance from, other members of the healthcare community) and timing of the intervention. |

12. Describe the implications of the following factors on the client problems listed in #10:

- a. application of relative anatomical, physiological and developmental components
- b. principles of exercise physiology/exercise science
- c. principles of nutrition
- d. effects and potential side effects of pharmaceutical intervention
- e. necessary infectious control procedures.

13. Given a case study, establish an appropriate physical therapy examination, evaluation, diagnosis, prognosis and intervention including procedures for obtaining appropriate referral to, and assistance from other members of the healthcare community.

PHT6302C PRINCIPLES OF DISEASE FALL 2013 WEEKLY CLASS SCHEDULE

LECTURE S	TOPIC	ASSIGNMENTS/READINGS	FACULTY
8/27/13 Week 2	Introduction, Metabolism, Altered cellular and tissue biology & Shock	Huether & McCance – pp.13-14, Ch. 3, & shock pp.627-634	Derrico
9/3/13 Week 3	Stress & disease Pain, Temperature, Sleep Vital Signs	Huether & McCance – Ch. 8,13 <b>Vital Signs Worksheet</b>	Derrico
9/10/13 Week 4	Inflammation Wound Healing	Huether & McCance – Ch. 5	Derrico
9/17/13 Week 5	Immunity, Hypersensitivity, & Immunodeficiency	Huether & McCance – Ch.6, & pp.178-201	Derrico
9/24/13 Week 6	Infection Dermatologic: Skin Assessment	Huether & McCance – pp.165-177 & Ch.39 <b>C&amp;S Worksheet</b>	Derrico
10/1/13 Week 7	Fluids and Electrolytes	Huether & McCance – Ch.4 <b>Electrolyte Worksheet</b>	Derrico
10/8/13 Week 8	Acid Base	Huether & McCance – Ch 4 <b>ABG Worksheet</b>	Derrico
10/15/13 Week 9	Hematologic disorders	Huether & McCance – Ch.19 & 20 & pp 538- 541 <b>CBC Worksheet</b>	Derrico
10/22/13 Week 10	Musculoskeletal disorders & metabolic bone disease	Huether & McCance – pp.987-1017 & 718-720	Derrico
10/29/13 Week 11	Pulmonary conditions	McCance & Huether Ch.25,26 & pp.760-762	Derrico
11/5/13 Week 12	Cardiovascular conditions	Huether & McCance pp.609-619	Derrico
11/12/13 Week 13	Renal & urologic disorders	Huether & McCance Ch.28 & 29 Urinalysis worksheet	Derrico
11/15/13 Friday	Gastrointestinal disease	Huether & McCance Ch.33 & pp.894-912	Derrico
11/19/13 Week 14	Hepatic, Biliary & Pancreatic disorders	Huether & McCance pp.915-929	Derrico
<b>No Class 11/26</b> Week 15			
12/3/13 Week 16	Endocrine disorders	Huether & McCance Ch.17, pp.447-458 & 469-472	Derrico
<b>Final exam</b>	<b>12/ /13</b>		