

The Florida State University College of Medicine

**BMS 6511** 

# **Clinical Organ Physiology**

Spring 2013

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# Instructors

### **Course Director**

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### Faculty

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# **Course Overview**

# Learning Objectives

### Broad Educational Objectives for Clinical Physiology

1. Demonstrate an understanding of the normal function and dysfunction for each organ system and how all systems interface to maintain a viable homeostatic environment.

2. Understand the physiology underlying the symptoms seen in dysfunction of each organ system and how they relate to the body as a whole.

3. Demonstrate the ability to apply clinical data to the diagnosis and treatment of physiological malfunction in the organ systems.

4. Develop an adequate basis of knowledge in physiology on which to build as the student advances through to the second year courses and clerkships.

### Knowledge

1. Recognize the scientific bases of health, disease, and medicine to common and high impact medical conditions in contemporary society.

2. Describe the function of the healthy human body and each of its major organ systems at the macroscopic, microscopic, and molecular levels.

3. Recognize and discuss the implications of altered structure and function (pathology and pathophysiology) of the body and its major organ systems that are seen in various diseases and conditions.

4. Identify changes in the function of the human body associated with the aging process and be able to distinguish normal changes associated with aging from those that denote disease.

5. Describe basic clinical science principles to analyze and solve problems related to the diagnosis, treatment, and prevention of disease.

#### Skills

6. Demonstrate the ability to evaluate the patient's medical problems and to formulate accurate hypotheses to serve as the basis for making diagnostic and treatment decisions.

7. Demonstrate the ability to acquire new information and data and to critically appraise its validity and applicability to one's professional decisions, including the application of information systems technologies for support of clinical decision-making.

#### Attitudes/Behaviors

8. Demonstrate professionalism and high ethical standards in all aspects of medical practice, specifically competence, honesty, integrity, compassion, respect for others, professional responsibility and social responsibility.

FSUCOM – Competencies -Course Title BMS 6511			
Competency Domains	Competencies Covered in the Course	Methods of Assessment	
Patient Care	Х	Small group, simulation exercises	
Medical Knowledge	Х	Written exams and quizzes; NBME Subject Exam	
Practice-based Learning	Х	Students who do not achieve competency performance on an assessment will self- assess their knowledge gaps and formulate a plan for improvement.	
Communication Skills	х	Faculty and peer observation	
Professionalism	Х	Faculty and peer observation	
System-based Practice			

# Competencies

## Americans with Disabilities Act

Candidates for the M.D. degree must be able to fully and promptly perform the essential functions in each of the following categories: Observation, Communication, Motor, Intellectual, and Behavioral/Social. However, it is recognized that degrees of ability vary widely between individuals. Individuals are encouraged to discuss their disabilities with the College of Medicine's <u>Director of Student Counseling</u> <u>Services</u> and the FSU Student Disability Resource Center to determine whether they might be eligible to receive accommodations needed in order to train and function effectively as a physician. The Florida State University College of Medicine is committed to enabling its students by any reasonable means or accommodations to complete the course of study leading to the medical degree.

The Office of Student Counseling Services

Medical Science Research Building, G146 Phone: (850) 645-8256Fax: (850) 645-9452

This syllabus and other class materials are available in alternative format upon request. For more information about services available to FSU students with disabilities, contact the:

#### **Student Disability Resource Center**

97 Woodward Avenue, South Florida State University Tallahassee, FL 32306-4167 Voice: (850) 644-9566 TDD: (850) 644-8504 sdrc@admin.fsu.edu http://www.fsu.edu/~staffair/dean/StudentDisability

### Academic Honor Code

The Florida State University Academic Honor Policy outlines the University's expectations for the integrity of students' academic work, the procedures for resolving alleged violations of those expectations, and the rights and responsibilities of students and faculty members throughout the process. (Florida State University <u>Academic Honor Policy</u>)

### Attendance Policy

The College of Medicine has detailed attendance policies as they relate to each cohort and events that conflict with course schedules. See pages 28-29 and 43-44 of <u>FSUCOM Student Handbook</u> for details of attendance policy, notice of absences and remediation.

Costanzo, L.S. Physiology, Saunders, 4th Edition, 2010.

# **Suggested Materials**

Supplemental readings and resources (most are available online via COM library):

Durbin, D. Rapid interpretation of EKG's, 6th Edition, 2000.

Costanzo, L.S. Physiology: Case and Problems, 2nd Edition, 2006

Pretest Physiology (USMLE Step1) by James Ryan and Michael Wang 10th Ed (2002), Published by McGraw-Hill, ISBN: 0071371990.

### Access Medicine Library Web site monographs

1. Cardiovascular Physiology, 6th Edition David E. Mohrman, Lois Jane Heller

2. Vander's Renal Physiology, 6th Edition Douglas C. Eaton, John P. Pooler

3. Pulmonary Physiology, 7th Edition; Michael G. Levitzky

- 4. Gastrointestinal Physiology; Kim E. Barrett
- 5. Endocrine Physiology, 2nd Edition; Patricia E. Molina

# Assignments

There will be 3 integrated block exams which include content from all Year 1 Spring semester courses. Physiology items on each exam will be in a "board-type" multiple choice format that emphasizes problem solving rather than rote memory. The course endorses a criterion-referenced teaching philosophy in which exams test the specific ideas that all students are expected to master (criteria), with no attempt to rank order student performance. Thus, there is no reason for students to feel competitive with each other. On the contrary, higher achievement can be expected when students work cooperatively. While all students are expected to pass each exam with a score  $\geq$  70%, we encourage you to aspire to mastery (100%) of the material and will do everything we can to help you achieve scores of 80% or higher.

Weekly quizzes will be mandatory but formative, i.e., you must take them when scheduled, but they do not contribute to exam average. Each quiz is not only a formative assessment, but an active learning process. These formative quizzes will allow students and the course director to track progress on a weekly basis.

At the end of the semester, students will take the NBME subject exam in Physiology. We have given this subject exam every year and are aware that the exams are difficult and sometimes contain items not specifically covered in the course. Be confident that the course director takes that into account in setting the "passing" performance level.

# Grading System

FSU COM has adopted a pass/fail grading system which is used in the curriculum for the first and second years (See <u>page 31</u> of Student Handbook). To achieve a grade of Pass in BMS 6511 (Physiology) a student must meet <u>all</u> of the following requirements:

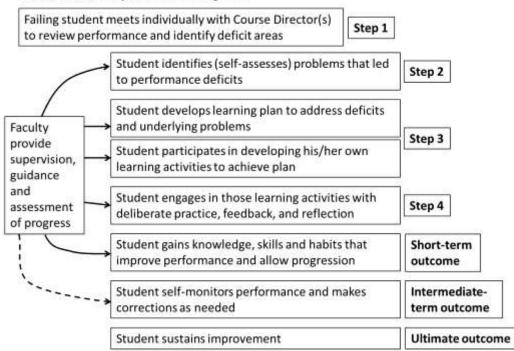
- A final average ≥ 70% on all examination questions. An average <70% will receive a grade of fail, which will require remediation or repetition of the course, as determined by decision of the Student Evaluation and Promotion Committee. A student whose performance is below passing during the course, i.e.,
  - <65% on any one exam

OR

• <70% on any two exams in the semester

is required to engage in and complete the Performance Improvement Program in consultation with the Course Director. The purpose of this program is to assist the student in developing the skills and habits necessary to succeed in the curriculum as well as to address specific performance deficits.

#### Performance Improvement Program



- Satisfactory performance on the NBME Basic Sciences Subject Examination in Physiology, as determined by the Course Director. The score will be normalized based on class average and historical data.
- 3) Attendance and satisfactory participation in all required sessions, as determined by the Course Director. Unexcused absence from an activity for which attendance is required (for example, Small Group session) may be considered as an issue of Professionalism and require completion of the Performance Improvement Program.
- Demonstration of the attitudes and behaviors of Medical Professionalism in all aspects of the course. Issues of Professionalism may require completion of the Performance Improvement Program.