

# **BMS 6511 CLINICAL ORGAN PHYSIOLOGY** **SYLLABUS 2009**

## **Course Faculty**

### *Course Director:*

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Office hours: (Mon - Wed: 12:00-1:00 and by appointment),

### *Large Group/Lecture Faculty:*

James Olcese, Ph.D. (645-1479; [james.olcese@med.fsu.edu](mailto:james.olcese@med.fsu.edu))  
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## **Course Description and Components**

Students will study in detail the clinical physiology of organ systems and their integration. Function and dysfunction will be studied and integrated with materials presented in Biochemistry, Anatomy (Gross and Micro), Neuroscience, and Doctoring courses. A clinically based integrated organ system approach will be used, covering the: autonomic, cardiovascular; pulmonary; renal; gastrointestinal and endocrine and reproductive systems.

## **General Schedule: See Blackboard for detailed, daily schedule**

Monday: Lecture: 2:00-3:30  
Tuesday: Small groups: 3:00-4:30  
Wednesday: Lecture: 2:00 – 3:30  
Thursday: Optional tutorial: 3:00-4:00  
Friday: Quiz: 1:00-1:20  
Lecture: 2:30-4:00

Block Exam Dates (Friday mornings): Jan 30, Feb 27, April 3, April 24  
NBME Exam Date: May 1

## **Course Objectives and Goals**

*Specific Content Objectives will be provided for each large group session.*

### *Broad Educational Objectives*

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 in Physiology, Pharmacology, Pathology and Doctoring.

### *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.

The Clinical Organ Physiology Objectives relate to the FSU COM competencies as follows:

FSU COM Competency	Physiology Objective
Professional Values, Attitudes, Behaviors	8
Moral Reasoning	
Communicating with Patients, Families & Colleagues	
Application of Basic Biomedical & Behavioral Sciences	1,2,3,4
Essential Clinical Skills	
Problem Solving & Critical Thinking	5,6
Lifelong Learning & Information Management	7
Social, Cultural, Community Context of Health, Illness & Care	
Personal Awareness	
Organizations, Systems, and Quality Improvement	

### **Course Schedule**

Check times for course events in the course master schedule that is posted on the Blackboard Web Site (<http://campus.fsu.edu>).

### **Required and Recommended Learning Materials:**

*Required:* Costanzo, L.S. Physiology, Saunders, 3rd Edition, 2006.

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

Ganong, William F. Review of Medical Physiology, 22<sup>nd</sup> edition, 2005.

Color Atlas of Physiology, 2003. [www.theime.com](http://www.theime.com) (COM library e-book)

Color Atlas of Pathophysiology, 2000. [www.theime.com](http://www.theime.com) (COM library e-book)

Durbin, D. Rapid interpretation of EKG's, 6<sup>th</sup> Edition, 2000.

Other resources:

Costanzo, L.S. Physiology: Case and Problems, 2<sup>nd</sup> 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

**Evaluation of Student Performance and Grading:**

There will be 4 integrated examinations (Physiology, Biochemistry, Doctoring 103). There will be 50 physiology questions on each exam. Questions will be one-best-answer LCME Step I examination format. There will be a total of 200 possible points from the 4 exams.

The NBME Basic Sciences Subject Examination in Physiology will be administered at the end of the semester. The score for this exam will be normalized so that the highest score will be 50 points. Point assignment will be based on both class average and class standard deviation.

There will be 11 quizzes with a maximum value of 5 pts each. Quizzes will be administered in a combined format with the Biochemistry quiz at 1:00 on Fridays. There will be a total of 50 possible points for quizzes (lowest quiz will be dropped). The final course grade will be based upon the percentage of the total available points obtained from a maximum possible of 300 points.

A = > 90 % correct  
B+ = 87 - 89.9% correct  
B = 80 - 86.9 % correct  
C+ = 77 - 79.9% correct  
C = 70 - 76.9 % correct  
D = 65 - 69.9 % correct  
F = < 64.9 % correct

## **Attendance, Remediation, and Other College of Medicine Policies**

### **COM Attendance Policy – Philosophy:**

#### **We believe that:**

Professionalism is a major component of our medical curriculum. We believe students should conduct themselves appropriately in the various educational activities of the curriculum. This conduct includes coming to educational activities on-time, using the laptop computers only for course work during the educational activity, and not disrupting the class if late. The faculty should also demonstrate professionalism, by starting and ending all scheduled educational activities on time and providing a course schedule with clearly explained course policies in the course syllabus. Any changes in the schedule should be given to the students in a timely manner.

Students will be accountable and personally responsible for attending all educational activities (small groups, labs, clinical experiences, examinations, lectures, computer sessions, etc.).

Unexcused absences reflect negatively on the goals and objectives of the medical curriculum and demonstrate unprofessional behavior by the respective student.

We owe it to our state legislature and the citizens of the State of Florida to provide a quality educational program that meets the needs of our students in preparing them for the M.D. degree.

#### **Attendance Policy**

Students are expected to attend all scheduled activities. Students are expected to be on time. Being on time is defined as being ready to start at the assigned time. If a student has an emergency that prevents her/him from attending a scheduled activity, s/he is to call and notify the Office of Student Affairs (Year 1/2) or the Regional Campus Dean / Student Support Coordinator (Year 3/4) and request that they inform the supervisors/professors/clerkship faculty/education director for that activity. If at all possible, the student should also call and at a minimum, leave a message with one of the course/clerkship directors. It is important that students realize that their absence or tardiness negatively impacts a number of other people. Attendance, including tardiness, is part of the student's evaluation for professionalism. Negative evaluations may result in decreased grades and in severe cases, referral to the Student Evaluation and Promotion Committee.

#### **Procedure for Notification of Absence**

##### **Year 1/2**

If the student knows in advance of an upcoming legitimate absence, the online "Advance Request for Absence from Educational Activity(ies)" process should be followed as outlined below.

If the absence occurs due to an unforeseen emergency, the student should contact the course director and the Associate Dean for Student Affairs immediately to report the absence including the reason for the absence.

The implications for the absence (e.g., remediation, course grade adjustment, make-up exam, etc.) will be given to the student by the course director and final decisions regarding these actions shall rest with the course director.

The online “Request for Absence” process should be used for all absences, including post-illness absences, regardless of whether the student is requesting an absence from one or more classes or the entire day. Here is how it works.

- 1) Student completes online form: <https://apps.med.fsu.edu/absence>  
(Form will only work in Internet Explorer)
- 2) The form is routed to student affairs for approval then to appropriate Course Directors/Instructors
- 3) Course Directors will approve/deny request
- 4) Students can check on the status of the progress of the request by clicking on the “Pending requests” link, where they will be able to see if the instructor(s) has taken action on the form. (If the instructor has not taken action within 24 hours, students can contact him/her directly to let him/her know that the request is pending.)
- 5) The student will receive an email indicating whether the request has been approved/denied.

Students must include all the courses/activities they plan to miss on the requested day of absence (lecture, small groups, quiz, exam, OSCE, etc.) If students plan to be gone the entire day and fail to include an activity/class on the form, they will NOT be excused from that particular activity/class. It will be considered unexcused. It is the students’ responsibility to ensure the form is filled out completely with all the courses/activities they will miss for that particular day.

If a student’s request has been denied, the email will not indicate the reason nor indicate which instructor denied the request.

Some reasons that are likely to automatically disqualify an advance request are: exams, CLC sessions and OSCEs -- unless it is for extreme circumstances (illness, family emergencies, etc).

### **Remediation Policy for Absences from Examinations, Quizzes, Small Group Sessions, Preceptor visits, and Clerkship Call:**

The remediation policies for absences from examinations, quizzes, small group sessions, and clerkship call are:

1. **POLICY ON MISSED EXAMINATIONS:** Students are required to take major in-term and final examinations. Based on Curriculum Committee policy, a student can only be excused from an examination by a course/education director decision based on the personal situation of the student. The Course/Education Director will determine the time of the exam make-up session. Also, according to the Curriculum Committee decision and the existence of the FSU COM honor code, the student will be given the same examination given to the other students. *In this course (BMS 6520), all examinations must be made up within one week of returning to class.*
2. **POLICY ON MISSED QUIZZES:** Students are required to take scheduled and unscheduled quizzes in the courses/clerkships. A student can only be excused from a quiz by a Course/Education Director decision based on the personal situation of the student. The student must make arrangements with the Course/Education Director to make up a missed quiz. Also, according to the curriculum committee decision and the existence of the FSU COM honor code, the student will be given the same quiz given to the other students. *In this course (BMS 6520), all quizzes must be made up within one week of returning to class.*

3. **POLICY ON MISSED SMALL GROUP SESSIONS, PRECEPTOR VISITS, AND CLERKSHIP CALL:** The student should contact the Course Director, small group leader, Clerkship Director or Education director for instructions on remediation of the missed session and material covered. *In this course (BMS 6520), missed small group sessions must be made up by reviewing the cases that will be available on Blackboard. The student will be responsible for the material.*

### **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. Students are responsible for reading the Academic Honor Policy and for living up to their pledge to “. . . be honest and truthful and . . . [to] strive for personal and institutional integrity at Florida State University.” (Florida State University Academic Honor Policy, found at <http://www.fsu.edu/~dof/honorpolicy.htm>.)

### **Students With Disabilities:**

The Florida State University adheres to Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 (ADA) in prohibiting discrimination against any qualified person with a disability. Students with specific questions regarding the FSU policies governing students with disabilities may contact the Student Disability Resource Center.

**Students with disabilities who wish accommodations based on a disability must notify the College of Medicine Office of Student Affairs and register with the FSU Student Disability Resource Center (SDRC). In order to register with the SDRC the student must provide the Center with the required documentation. A definitive diagnosis of disability must be stated in the documentation. Details regarding the required documentation for each disability can be found at the SDRC website [www.fsu.edu/~staffair/dean/StudentDisability](http://www.fsu.edu/~staffair/dean/StudentDisability).**

### **Exam Protocol for Students with Disabilities at FSU College of Medicine**

The Florida State University adheres to Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 (ADA) in prohibiting discrimination against any qualified person with a disability. Students with specified questions regarding the FSU policies governing students with disabilities may contact the Student Disability Resource Center (SDRC).

Students who warrant accommodations based upon the functional effects of a physical or learning disability should adhere to the following procedure:

1. Student meets with a representative of the Student Disability Resource Center (SDRC), provides documentation of a disability and requests accommodations. (A definitive diagnosis of a disability must be identified in the documentation. Details regarding the required documentation for each disability can be found at the SDRC website: [www.fsu.edu/~staffair/dean/StudentDisability](http://www.fsu.edu/~staffair/dean/StudentDisability).)
2. For entering students, this is best accomplished prior to the beginning of classes (e.g., Orientation Week). For all other students, it must be completed at least one month prior to the examination date when accommodations would be instituted.
3. SDRC staff will review the documentation to determine sufficiency and eligibility for accommodations. If additional documentation is needed, this may be obtained through the Office of Student Counseling Services (OSCS) at the COM or elsewhere in the community. If additional testing is required, temporary accommodations may be granted while documentation is completed.

4. Student and SDRC staff identifies the type of accommodations that are appropriate based upon the student's disability.
5. SDRC staff completes and signs a Faculty Letter addressed to the COM's Associate Dean for Student Affairs indicating that documentation supports specific accommodations.
6. Student signs Faculty Letter indicating agreement with suggested accommodations and understanding of his or her responsibility to present the letter to the Associate Dean for Student Affairs at the College of Medicine.
7. SDRC prints two copies of the Faculty Letter and retains a copy as a record of the initial meeting, eligibility and accommodation request.
8. Student will schedule an appointment to meet with the Associate Dean for Student Affairs within one week's time to present the second original Faculty Letter. The student is also encouraged to keep a copy of this document.
9. The Associate Dean for Student Affairs will review the letter, determine appropriateness of all requests based on the requirements for the college, and discuss concerns with student and/or call SDRC when appropriate.
10. The letter will be kept in a confidential place in the Office of Student Affairs and not made part of the academic record of the student.
11. Once accommodation have been confirmed, the student is to schedule an appointment with the OSCS.
12. The OSCE's at the COM will be the representative responsible for facilitating accommodations for medical school students who have been determined eligible for services. The OSCS will explain to the student how the accommodations will be facilitated.
13. The student will then be responsible for completing the SDRC Exam Sign-Up Sheet and ensuring that his/her Year 1/Year 2 Year and Course Directors overseeing the examination have signed it. Exam Sign-Up Sheets may be obtained from year 1/Year 2 Coordinators or the OSCS.
14. The student will return the completed SDRC Exam Sign-up Sheet to the SDRC at least **5 WORKING DAYS** prior to the scheduled date/time of the exam in order to facilitate testing/exam accommodations. Failure to meet this requirement will release the COM and SDRC from the responsibility of providing accommodations for that particular examination.
15. A special situation arises with the NBME examinations. Since these examinations need to be ordered well in advance of the test date, students who are requesting to take an NBME under special accommodations should complete the Exam Sign-Up sheet at **least 4 weeks** prior to the date the exam is to be administered.
16. Students who qualify for exam accommodations will follow SDRC's Testing Center policies. If the examination is not taken at the SDRC, the COM (in collaboration with SDRC) will coordinate the provision of other accommodations. This might occur for quizzes or shorter, in-class exams. The student is responsible for notifying the instructor at least five working days prior to the quiz/exam if on-site accommodations are desired. Except for extenuating

circumstances, all Year1/Year2 integrated and Year1/Year2 NBME exams requiring accommodation will be administered at the SDRC.

17. For those students attending the regional campuses, Steps 1- 11 should be followed in order to be approved for accommodations. However, the Regional Campus Dean will be responsible for overseeing the implementation of the accommodations in collaboration with the Associate Dean for Student Affairs.
18. Provision of exam proctors and appropriate distribution of exams for students receiving accommodation will be administered by the Office of Medical Education (for Year 1/2 and the Regional Campus Deans (Year 3/4).

### **Course Evaluations**

Student evaluations throughout the course are an important way of improving medical education, particularly during the founding years of the College of Medicine. Not only are your comments and suggestions valued, but the evaluation process represents one way for you to become familiar with the peer review process. Peer review is an important quality management function in all branches of medicine. In order for peer review to work properly, it must be taken seriously by both the evaluators as well as those being evaluated. Therefore, we ask that you give careful consideration to evaluations. When making comments, consider what you would say if you were face to face with the person to whom the comments are directed. How would you react if the comments were directed at you? Give thought to how learning resources were used in regard to the way to learn best. What worked for you and what did not? How is your time used optimally? Are you making adequate progress? Are you being challenged to improve? Be specific. Ultimately, your use of the evaluation process can help you learn how to improve your own medical practice.