

FLORIDA ATLANTIC UNIVERSITY™

Graduate Programs—COURSE CHANGE REQUEST

UGPC APPROVAL _____
 UFS APPROVAL _____
 SCNS SUBMITTAL _____
 CONFIRMED _____
 BANNER POSTED _____
 CATALOG _____

DEPARTMENT: N/A	COLLEGE: COLLEGE OF MEDICINE
COURSE PREFIX AND NUMBER: BMS 6633 ; BMS 6642	CURRENT COURSE TITLE: THE CARDIOVASCULAR SYSTEM; RESPIRATORY SYSTEM
CHANGE(S) ARE TO BE EFFECTIVE (LIST TERM): FALL 2012	TERMINATE COURSE (LIST FINAL ACTIVE TERM):
CHANGE TITLE TO: PATHOPHYSIOLOGY AND THERAPEUTICS 2 BMS 6541	CHANGE PREREQUISITES/MINIMUM GRADES TO*:
CHANGE PREFIX FROM: _____ TO: _____	CHANGE COREQUISITES TO*:
CHANGE COURSE NO. FROM: _____ TO: _____	CHANGE REGISTRATION CONTROLS TO:
CHANGE CREDITS FROM: _____ TO: _____	*Please list both existing and new pre/corequisites, specify AND or OR, and include minimum passing grade.
CHANGE GRADING FROM: _____ TO: _____	
CHANGE DESCRIPTION TO:	
Attach syllabus for ANY changes to current course information	
Should the requested change(s) cause this course to overlap any other FAU courses, please list them here.	Departments and/or colleges that might be affected by the change(s) must be consulted and listed here. Please attach comments from each.

Faculty contact, email and complete phone number: Michelle Schwartz, M.D.; Assistant Professor of Clinical Biomedical Science; 561 997-2554; mschwartz@mdvip.com and Ira Gelb, M.D.; Professor of Clinical Biomedical Science; BC-121, 561 297-2249; ijgelb@fau.edu

Approved by: Department Chair: <u><i>Stephen Nelson</i></u> College Curriculum Chair: <u><i>Antonio Azzares</i></u> College Dean: <u><i>Michael</i></u> UGPC Chair: _____ Graduate College Dean: _____	Date: <u>3/5/12</u> <u>3/5/12</u> <u>3-5-12</u> _____ _____	ATTACHMENT CHECKLIST *Syllabus (see guidelines for requirements: http://www.fau.edu/graduate/facultyandstaff/programscommittee/index.php) *Written consent from all departments affected by changes
--	---	---

Email this form and syllabus to UGPC@fau.edu one week before the University Graduate Programs Committee meeting so that materials may be viewed on the UGPC website prior to the meeting.

FLORIDA ATLANTIC UNIVERSITY CHARLES E. SCHMIDT COLLEGE OF MEDICINE COURSE SYLLABUS

GENERAL INFORMATION

Course Number: BMS 6541
Online: Blackboard Learning System
Term: Fall 2012
Course Title: Pathophysiology and Therapeutics 2
Course Directors: Michelle Schwartz, M.D. and Ira Gelb, M.D.
Telephone: 561-997-2554 and 561-297-2249
E-Mail: mschwartz@mdvip.com and ijgelb@fau.edu

Course Support: Abner Alexis Office: 135A Telephone: 561-297-0988
Email: aalexis5@fau.edu

COURSE DESCRIPTION

The Pathophysiology and Therapeutics 2 course is an 11-week course in the fall semester of Year 2. It is the first course in Year 2 and provides the basic concepts and vocabulary in the areas of the anatomy, chemistry, histology, microbiology, pathology, pharmacology, and physiology of the cardiovascular system, the respiratory system, and related components of the hematologic system. The course uses an integrated approach by combining lectures, problem-based learning (PBL), problem sets, and simulated laboratory instruction.

This course introduces a modified approach to PBL in which there will be two PBL cases per week, allowing students to compare and contrast the pathology, pathophysiology and therapeutics of two related disease processes (e.g., obstructive lung disease due to COPD vs. asthma). This approach will be used throughout the remaining Pathophysiology and Therapeutics courses in Year 2. This course also introduces the use of a final course exam derived from NBME questions and the use of other question formats on written exams, including short answers or essays, which will also be used in subsequent Year 2 courses.

COURSE OBJECTIVES

For this course, students are expected to:

- Understand the basic vocabulary and physiology of the basic and clinical cardiovascular sciences as they relate to structures, processes and diseases of the coronary and peripheral vasculature, cardiac muscle, conduction system, valvulature, and pericardium.
- Correlate basic normal human anatomy with images used by health care professionals
- Identify the knowledge base and gaps related to the application of course content to clinical disorders
- Utilize a variety of resources (faculty, textbooks, computers, internet, etc.) to find information about anatomical, histological and developmental issues related to normal structure and clinical problems of the cardiovascular system
- Understand the basic pathologic processes as they apply to disease mechanisms of the cardiovascular system

- Understand the abnormal findings on a cardiovascular exam of a patient with a cardiovascular system disorder
- Understand the principles and practice of pharmacological therapy for disorders of the cardiovascular system
- Understand the principles of reading an electrocardiogram
- Demonstrate the ability to recognize heart sounds via auscultation on a simulated patient
- Demonstrate the ability to recognize and manage basic cardiovascular pathologic processes on a simulated patient
- Understand the interrelated roles of the renal and cardiovascular systems in regulation of blood pressure and therapeutic management of hypertension and hypotension.
- Understand the mechanics of normal lung function and gas exchange and the effects of various diseases.
- Understand the tests used to evaluate lung function and gas exchange and learn how to interpret them.
- Understand the characteristic findings on history, physical examination and imaging studies in various lung diseases.
- Define and classify the various obstructive lung diseases and apply to treatment the integrated knowledge of pathology and physiology.
- Define and classify the various interstitial lung diseases and apply chest X-ray and CT findings to devising therapeutic options.
- Use diagnostic strategies and basics of antibiotic therapy to the management of pulmonary infections, as diagnosed by radiological and physical findings.
- Understand the classification, the risk factors, the presentations, the diagnostic strategies and the treatment alternatives for lung cancer.
- Define pulmonary hypertension and embolism and describe the appropriate diagnostic evaluation and therapeutic options.
- Understand the diagnosis and treatment of respiratory failure with the appropriate use of oxygen therapy and application of the basics of mechanical ventilation.
- Understand the etiology, pathogenesis, and pathophysiology of selected primary hematologic disorders related to the cardiovascular and pulmonary systems, including anemias and abnormalities of hemostasis (bleeding and clotting).
- Describe the roles of the lungs, kidneys, red blood cells, and plasma in acid-base homeostasis.
- Interpret laboratory findings including arterial blood gases to determine acid-base status and determine approaches to management of common acid-base disturbances.
- Understand basic principles of blood transfusion, including the use of blood components.

EVALUATION

Summative Assessment (Grading): The P&T2 course will be graded as: S (Satisfactory) or U (Unsatisfactory)

The course grade will have two components (exams & quizzes, and PBL). **In order to pass the course with S grade, the student will be required to pass both components.**

Component 1

The first component consists of exams and quizzes. Exams are multiple choice tests covering objectives in lectures, PBL cases and problem sessions.

A passing grade for this component will be $\geq 75\%$ of total points possible.

Component 2

The second component is PBL. Grading for PBL will consist of a narrative facilitator assessment at the end of the course, and will be given by the facilitators as "satisfactory" (S) and "unsatisfactory" (U) without assigned numerical points. The facilitators will provide notations as to whether the student's academic and professional performance is on the level of S or U based on the student's performance the following areas:

- Research skills;
- Reasoning;
- Professionalism: interpersonal skills;
- Professionalism: work habit.

Formative Assessment (not graded): Students will receive narrative feedback from their facilitator and the other students in their PBL group mid-course, and narrative feedback from the other students in PBL. Each student is expected to complete feedback forms for his/her peers.

COURSE INFORMATION

Attendance Policy

Professionalism is a major component of the FAU College of Medicine's curriculum. Therefore, medical students as future professionals should conduct themselves appropriately in all curricular activities, including classroom work, laboratory work, and clinical experiences. The professionalism of a medical student includes arriving to educational activities on-time, using laptop computers only for course work during the educational activity, and minimizing disruptions to the educational exercise.

In accordance with the Student Handbook, students are accountable and personally responsible for attending all scheduled educational activities for FBS 3, arriving on time and prepared. It is mandatory for students to attend all PBL sessions, clinical case or problem sessions, labs, and examinations. Students are expected to attend all didactic sessions, and are required to arrive in the classroom on time and to stay to the end of the session. In general, makeups will not be provided to non-assessment activities. Makeup assessments will be provided to students only in the case of a true emergency.

If a student has an emergency that prevents him/her from attending a scheduled activity, he/she is to follow the emergency notification procedure (http://med.fau.edu/medicine/student_affairs/pdfs/Student_Handbook.pdf). If possible, the student should also call and leave a message with the course director or group facilitator. Attendance, including tardiness, is part of the evaluation for professionalism in FBS 3. Poor evaluations may result in decreased grades and, in severe cases, referral to the Medical Students Promotions & Professional Standards Committee.

FAU COM Policy for the Provision of Health Care Services to Students

Faculty members and residents or fellows with academic assessment/evaluation responsibilities for students are precluded from evaluating any students who are also their patients, because of dual-relationship and conflict of interest issues. The conflict created by this dual role could affect both the quality of medical care and the content of such evaluations in the following way:

- A student-patient might be less likely to report a sensitive medical issue (e.g., drug abuse) to his/her physician if that physician will be providing an evaluation or grade for the student; and
- A faculty member's evaluation or grade (which could include some subjective elements) could potentially be, despite the evaluator's commitment to neutrality, positively or negatively affected as a result of the therapeutic relationship.

In instances of pre-existing doctor-patient/student relationships, the physician must discuss with the student the potential for a dual relationship and inform the student that he/she will recuse him- or herself from any situation in which a formal evaluation is required.

In emergent situations or other instances in which an appropriate referral is not available, a student can seek the care of any faculty member or resident. In this circumstance as well, the physician must discuss with the student the potential for a dual relationship and recuse him or herself from any situation in which a formal evaluation is required.

At the beginning of each course or clerkship, the Curriculum Office provides students and clinical faculty with small group assignments as a routine part of the scheduling process. The Office will notify the students and faculty that they should report any potential conflict of interest with each other that might necessitate a change in small group assignments. The type of conflict will generally not be disclosed, in the interest of privacy. The course administrator(s) will be instructed to facilitate such requests without inquiring as to the nature of the conflict of interest.

Regarding the psychiatry clerkship, information about potential teacher/physician dual relationship will be provided to the medical students on the first day. Students are told that if they have seen a clinician at the facility as a patient, they should notify the curriculum coordinator who will modify the schedule to avoid activities with the clinician in question, without alerting the site director as to the purpose of the schedule change.

Religious Observance (Adapted from the FAU Policy)

The College of Medicine recognizes that students, faculty and staff observe a variety of religious faiths and practices. Although many religious holidays are observed with time off, a few of the religious days of observance may be part of the academic calendar. The College respects the religious beliefs and practices of its students and seeks to accommodate them within the requirements of the academic schedule. As a result, a student who must be absent from a class requirement will not be penalized. Students who anticipate absence should notify the OSA and the supervising faculty in advance. The instructor will provide a reasonable opportunity to make up such excused absences. Any student who feels aggrieved regarding religious accommodations may present a grievance to the Director of Equal Opportunity Programs. Any such grievances will follow Florida Atlantic University's established grievance procedure regarding alleged discrimination. The College will follow the established FAU policy regarding absences due to personal observances of religious holidays.

To review the policy, access the Leave of Absence Policy:
http://www.fau.edu/policies/files/PM76_OCR.pdf

Disability Support Services

In compliance with the Americans with Disabilities Act (ADA), students who require special accommodations due to a disability to properly execute coursework must register with the Office for Students with Disabilities (OSD) located in Boca Raton – SU133 (561-297-3880 and follow all OSD procedures.

Honor Code

Students at Florida Atlantic University are expected to maintain the highest ethical standards.

Academic dishonesty, including cheating and plagiarism, is considered a serious breach of these ethical standards, because it interferes with the University mission to provide a high quality education in which no student enjoys an unfair advantage over any other. Academic dishonesty is also destructive of the University community, which is grounded in a system of mutual trust and places high value on personal integrity and individual responsibility. Harsh penalties are associated with academic dishonesty. For more information, see:

1. *The Policy on Academic, Professional and Behavioral Requirements and Standards governing the College of Medicine*
2. *Oath of Academic and Professional Conduct for Students in the College of Medicine*
3. http://www.fau.edu/regulations/chapter4/4.001_Honor_Code.pdf.

REQUIRED TEXT/READINGS

Title	Author(s)	Publisher
Pathophysiology of Heart Disease	Lilly	Lippincott Williams & Wilkins, 4 th edition (2006)
12-Lead ECG: The Art of Interpretation	Garcia, Holtz	Jones and Bartlett (2001)
Principles of Pulmonary Medicine, 5 th Edition	Weinberger, Cockrill, Mandel	Saunders, Elsevier
Respiratory Physiology-The Essentials, 8th Edition	West	Lippincott Williams & Wilkins, 2008

Recommended Textbooks:

Title	Author	Publisher
Cardiovascular Physiology Concepts	Richard E Klabunde	Lippincott Williams & Wilkins (2004)
Harrison's Principles of Internal Medicine, 16th Edition	Anthony S. Fauci, Eugene Braunwald, Dennis L. Kasper, Stephen L. Hauser, Dan L. Longo, J. Larry Jameson, and Joseph Loscalzo, Eds.	McGraw Hill <i>(Available through online access at UM Calder Library)</i>

Supplementary resources:

Integrated Medical Curriculum <http://imc.meded.com/>

The site provides materials related to the gross anatomy component of the FBS sequence. The username and password given to each student at the beginning of the FBS1 course will continue to be valid.

Medline Dictionary, an online dictionary provided by the US National Library of Medicine and the National Institutes of Health. A potentially useful resource during the PBL small group sessions.

Aperio Microscope Images: These virtual microscope images, which can be accessed through the Blackboard site, via the "Handouts and Links" tab, can be found at: <http://med.fau.edu/aperio>.

The Internet Pathology Laboratory for Medical Education, which can also be accessed through the Blackboard site via the "Handouts and Links" tab, is a comprehensive learning tool. Individual PBL-based exercises will utilize this resource. In addition, the application contains useful anatomy, radiology, histology, and microbiology images and tutorials, in addition to thousands of general and systemic pathology images. Students and faculty alike may wish to utilize this resource for learning and teaching purposes.