

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

GENERAL INFORMATION

Course Number: ~~BMS-6634~~ *BMS 6540*
Online: Blackboard Learning System
Term: Spring 2012
Course Title: Pathophysiology and Therapeutics 1
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COURSE DESCRIPTION

The Pathophysiology and Therapeutics 1 course provides the basic concepts and vocabulary in the areas of the anatomy, chemistry, histology, microbiology, pathology, pharmacology, and physiology of the gastrointestinal and hepatic systems and human nutrition, including normal nutrition and diagnosis and managements of common nutritional disorders. The course uses an integrated approach by combining lectures, problem-based learning (PBL) and simulated laboratory instruction. The PBL sessions in small groups will provide the fundamental knowledge of common gastrointestinal and hepatic disorders (including nutritional implications where appropriate) and will be complemented by lectures for specific diseases. The Simulation Center component will emphasize correlations with clinical cases and lead to the localization of digestive system lesions.

COURSE OBJECTIVES

During this course the student will:

- Acquire the basic vocabulary of basic and clinical sciences as they relate to structures, processes and diseases of the esophagus, stomach, small and large intestines, gallbladder, liver, and pancreas.
- Appreciate the concept of genetic predisposition and gene-environment interaction and how it affects the practice of Gastroenterology and Hepatology.
- Outline the fundamental aspects of the physiology of nutrition and digestion, and nutrition assessment.
- Correlate basic normal human anatomy with images generated by CT and MRI scanning procedures, ERCP, and other GI imaging techniques, and endoscopic visualization of the digestive system.
- Relate the gross anatomy components of the digestive system to the physical exam.
- List the basic pathologic processes of the hollow and solid organs of the gastrointestinal tract.
- Determine the localization of lesions or sites of injury when presented with digestive symptoms and provide suggestions for the pathophysiological mechanisms

- Recognize the abnormal findings on a digestive system exam of a patient with a gastrointestinal disorder.
- Synthesize the principles and practice of pharmacological therapy for nutritional and gastrointestinal disorders.
- Understand the organic micronutrient and macronutrient foodstuffs we encounter in the diet in terms of the chemical types – carbohydrates, proteins, fats, and their structures.
- Be able to compare and contrast the clinical and pathologic features of the common nutrition-related deficiency anemias.
- Understand the differences between the indications for enteral and parenteral nutrition support as well as the indications for potential delivery sites for each type of support.
- Understand the various etiologies of bacterial enterocolitis, including ingested pre-formed toxins, secretory enterotoxins, cytotoxic enterotoxins, and ingested enteroinvasive bacteria and apply basic concepts of diagnosis and management to clinical scenarios of patients with different forms of infectious diarrhea.
- Understand the basic principles of biliary metabolism and jaundice.
- Understand the epidemiology and clinical spectrum of alcoholic and infectious liver diseases.
- 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 digestive system.

EVALUATION

Summative Assessment (Grading): The P&T1 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
Handbook of Gastroenterology, 2 nd Edition	Yamada et al.	Lippincott Williams and Wilkins

Recommended Textbooks:

Title	Author	Publisher
Sleisenger and Fordtran's Gastrointestinal and Liver Disease, 8 th edition	Feldman, Friedman and Brandt	Saunders <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 FBS I 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.

GI Specific Resources:

Linus Pauling Institute – Micronutrient Research for Optimum Health <http://lpi/oregonstate.edu/infocenter>

The Micronutrient Information Center within this website provides detailed information on vitamins, minerals, other nutrients.

Department of Health and Human Services (HHS) and the Department of Agriculture (USDA) - The *Dietary Guidelines for Americans* have been published every 5 years since 1980. The Guidelines provide authoritative advice for people two years and older about how good dietary habits can promote health and reduce risk for major chronic diseases. They serve as the basis for Federal food and nutrition education programs.
<http://www.health.gov/dietaryguidelines/dga2005/document/>