

FLORIDA ATLANTIC UNIVERSITY™

Graduate Programs—NEW COURSE PROPOSAL

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

DEPARTMENT NAME: N/A

COLLEGE OF: MEDICINE

RECOMMENDED COURSE IDENTIFICATION:

PREFIX BMS COURSE NUMBER 6016 LAB CODE (L or C) _____

(TO OBTAIN A COURSE NUMBER, CONTACT MJENNING@FAU.EDU)

COMPLETE COURSE TITLE **FUNDAMENTALS OF MEDICINE 2**

EFFECTIVE DATE

(first term course will be offered)

SPRING 2012

CREDITS:

13

TEXTBOOK INFORMATION: Bickley, LS and Szilagy, PG. *Bates' Guide to Physical Examination and History Taking (Eighth Edition)*. Philadelphia, PA: Lippincott Williams & Wilkins; 2003.
 Smith, RC. *Patient-Centered Interviewing*. Philadelphia, PA: Lippincott Williams & Wilkins; 2001.
 Orient, JM. *Sapira's Art and Science of Bedside Diagnosis*. Philadelphia, PA: Lippincott Williams & Wilkins; 2000.; Leblond, R., DeGowin, RL. and Brown, DD. *DeGowin's Diagnostic Examination*. McGraw-Hill; 2004.

GRADING (SELECT ONLY ONE GRADING OPTION): REGULAR _____ PASS/FAIL _____ SATISFACTORY/UNSATISFACTORY _____

COURSE DESCRIPTION, NO MORE THAN 3 LINES: The Fundamentals of Medicine series is intended to teach the knowledge, skills, attitudes, and behaviors of the competent, ethical, and humane physician. This course builds on the knowledge and skills from Fundamentals of Medicine 1 and includes the areas of public health and ethics.

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PREREQUISITES:

ADMISSION TO THE FAU
SCHOOL OF MEDICINE

COREQUISITES:

OTHER REGISTRATION CONTROLS (MAJOR, COLLEGE, LEVEL):

PREREQUISITES, COREQUISITES & REGISTRATION CONTROLS SHOWN ABOVE WILL BE ENFORCED FOR ALL COURSE SECTIONS.

MINIMUM QUALIFICATIONS NEEDED TO TEACH THIS COURSE:
M.D. AND/OR PH.D.


Other departments, colleges that might be affected by the new course must be consulted. List entities that have been consulted and attach written comments from each. N/A

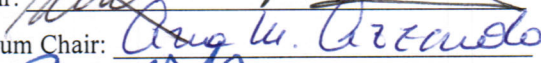
Faculty Contact, Email, Complete Phone Number:

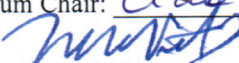
Mario Jacomino, M.D.; mjacomin@fau.edu; 561-297-0723

SIGNATURES

Approved by:

Department Chair: 

College Curriculum Chair: 

College Dean: 

UGPC Chair: _____

Dean of the Graduate College: _____

Date: _____

SUPPORTING MATERIALS

Syllabus—must include all details as shown in the UGPC Guidelines.

Written Consent—required from all departments affected.

Go to: <http://graduate.fau.edu/gpc/> to download this form and guidelines to fill out the form.

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

FAU COLLEGE OF MEDICINE

Syllabus :

1. **Course title :** Fundamentals of Medicine 2

Course number: BMS 6016

Number of credit hours: 13

Lecture Hours: Monday, Tuesday or Wednesday Afternoons, 1:00 PM-4:00 PM, BC-126, unless otherwise specified
Small Group Hours: Monday, Tuesday or Wednesday Afternoons, 1:00 PM-4:00 PM, BC-126, unless otherwise specified
Other Activity Hours: 3hrs/week each at the Community Preceptor site and the Department of Health Clinics; Time as assigned at: Simulation Center, Mae Volen Center in Boca Raton, Elder visit, Hospice center, Competency weeks

2. Course prerequisites:

Accepted for matriculation in the FAU College of Medicine.

3. Course logistics:

a. term: Spring 2012

b. not an online course

c. Biomedical Science Building room BC-126, simulation lab, small group PBL rooms, other off site locations, please see section 1 above.

4. Instructor information:

Course Directors:

Mario Jacomino, M.D.
RP-106
mjacomino@fau.edu
Office: 561-297-0723

Mira Sarsekeyeva, M.D.
BC-306A
msarseke@fau.edu
Office: 561-297-3790

Course Support: Ms. Ashia Milligan
BC-137
Phone: 561-297-4333
Fax: 561-297-0536
amilliga@fau.edu

Please note: All official student communication regarding the course will be sent via e-mail from the course directors or Ms. Milligan to students at their FAU e-mail address. If students would like to meet with the course directors, they must call the office of the course director they wish to meet with in order to schedule an appointment.

5. TA contact information:

N/A

6. Course description:

The Fundamentals of Medicine series is intended to teach the knowledge, skills, attitudes, and behaviors of the competent, ethical, and humane physician. In addition to basic skills and knowledge, beginning medical students need relevant experience to prepare them for clinical clerkships and, later, for their roles as physicians. Fundamentals of Medicine aims to hone their clinical abilities, especially effective physical diagnosis, while developing proficient communication skills, including reflective listening, establishing a therapeutic relationship, and eliciting a clinical history. These skills are key to becoming an exemplary physician.

7. Course objectives/student learning outcomes:

At the end of the course, medical students will be able to:

- Formulate strategies that deliver comprehensive health care with cultural humility- recognizing disparities and one's own personal biases.
- Explain how health care financing, health care policy, and medical malpractice effect the delivery of health care in the United States
- Practice techniques to maintain appropriate personal and professional balance
- Practice appropriate responses to challenging situations and ethical dilemmas encountered frequently in clinical practice
- Apply diagnostic and therapeutic interventions in both common and life-threatening clinical situations
- Prepare a report that synthesizes scholarly research completed during the clinical years
- Recognize conflicts of interest in the medical profession
- Demonstrate proficiency in the diagnosis and management of at least 10 of the most frequently encountered medical problems in the selected community practice.
- Describe the role of advanced practice providers, i.e. nurse practitioners and physician assistants, in a community practice.
- Discuss with community faculty the challenges and rewards of practicing in the selected community.
- Discuss with community faculty advantages and disadvantages of developing a community practice with an interdisciplinary team including advance practice providers, i.e., nurse practitioners and physician assistants.
- Identify a community health issue affecting this community and the potential advocacy role for a physician.
- Explore how the community physician may collaborate with other disciplines in the advocacy role
- Describe a healthcare systems issue or practice management issue which your community faculty identifies as important to the practice.
- Describe the influence of advanced practice providers, i.e., nurse practitioners and physician assistants, on practice management issues such as billing.

- Spend at least two half-days per week at a community health or public health or health-related organization and reflect on your learning there.
- Discuss with the community faculty complementary and alternative health professionals' roles in the community and how they relate to the community physician.
- Identify the local chief public health official and medical examiner.
- Describe how the community physician relates to public health surveillance needs
- and responds to public health risks.
- Identify "Homeland Security" issues which relate to a community physician.
- Define evidence-based medicine, and describe the EBM process. Value evidence in making medical decisions over opinion and the practice of life-long learning.
- Distinguish between different scales of measurement; define mean, median, mode, variance, range, and probability.
- Define epidemiologic concepts of incidence, prevalence, and rates including fatality rates (lecture given in SCI).
- Define criteria for inferring causality from statistical associations including the Surgeon General and Hill criteria.
- Recognize differences in study design for both observational and experimental studies including randomized controlled trials, community intervention trials, cohort studies, case-control, cross-sectional, case series, community surveys, systematic reviews, and meta-analyses. Discuss the strengths and weaknesses of each and the application of appropriate statistics for each study type.
- Recognize the value of a literature search strategy and define MESH. Translate strategy into a MEDLINE search of moderate complexity using MESH and limits appropriately.
- Define principles of statistics used in cohort and case-control studies including odds ratio, relative risk, and absolute risk. Interpret the results of a survival analysis. Define and recognize types of bias found in these studies.
- Explain the difference between statistical significance and clinical significance, type I and type II error, and define power. Recognize appropriate parametric and non-parametric tests for continuous data.
- Understand the use of and define markers to evaluate the strength of evidence, including absolute and relative risk reduction, number needed to treat, and confidence intervals. Differentiate between disease and patient oriented evidence. Use the above concepts in critically evaluating information from drug representatives.
- Define concepts relating to diagnostic tests including sensitivity, specificity, positive predictive value (PPV) and negative predictive value (NPV), ROC curves, and likelihood ratios; calculate sensitivity, specificity, PPV, NPV.
- Discuss characteristics of a good screening test and explain features of diseases amenable to screening.
- Explain common biases that occur in trials about screening.
- Understand the application of statistical and study-design concepts in evaluating clinical trials.
- Describe and define characteristics of randomized controlled trials such as randomization, blinding, concealed allocation, intention-to-treat analysis and explain how these characteristics reduce bias.
- Recognize appropriate statistical methods for categorical and continuous data, including Chi-squared, survival analysis, linear regression, logistic regression, and ANOVA.

- Define public health and explain the ten essential services of public health. Compare and contrast public health to medical care.
- Understand how cohort, case control, and ecological studies give evidence for environmental impacts on health. Explain the toxicologic paradigm and understand toxicologic risk assessment.
- Describe a range of possible public health and policy interventions for a public health issue and contrast with medical interventions for the same issue.
- Describe how the EBM process is used and applied in a medical setting. Distinguish between narrative review articles, systematic reviews, and meta-analysis and understand issues in using them such as publication bias, forest plots, and heterogeneity.
- Analyze the many factors that influence the development of the patient-physician relationship.
- Identify the elements that enhance or threaten the maintenance of the patient-physician relationship.
- Define common barriers to open communication.
- Distinguish strategies for successfully discussing difficult topics with patients (e.g., screening for domestic violence, talking about sex, domestic violence, breaking bad news).
- Identify the etiology, prevalence, risk factors, signs and symptoms of aggression and violence.
- Understand the fundamental terminology and concepts related to sexual development and adult sexuality that form the building blocks necessary to effectively communicate with patients about sex and sexuality.
- Conduct a patient interview in an empathic and respectful manner, demonstrating the student's ability to establish rapport.
- Utilize interviewing microskills to elicit pertinent aspects of the patient's history.
- Demonstrate professionalism in your interactions with patients, colleagues, and nursing staff.
- Display active listening, group participation, self-reflection, and constructive engagement of other students during small group sessions.
- Perform and record a complete medical history.
- Competently perform and interpret selected parts of the physical exam.
- Understand the importance of language, gender, social, ethnic and age issues on the interpretation of information and delivery of care.
- Utilize technology in terms of the electronic medical record and established library resources.
- Realize the importance of working as a team in the delivery of care.
- Compare challenging issues in medical ethics and use established methods to navigate discussions.
- Understand how all information gained in the care of a patient contributes to a differential diagnosis and management plan.
- Begin the process of recognizing how medical testing can help confirm and exclude possible disease entities.
- Compare and contrast careers in medicine
- Understand how a patient views the complexity of access in our current healthcare environment.

8. Course evaluation method

Examination Policy:

Exam Composition: All examination questions will be multiple-choice. Clinical vignettes will be used for many questions, and images will be incorporated as appropriate. Approximately 2-4 questions per afternoon session will potentially be used.

Therefore, a question like the following might appear on an exam:

A 32 year-old woman comes to her physician with vague, intermittent abdominal pain that has been present for six months. She has had no fever, vomiting, diarrhea, bloody stools, or weight loss. She has had an extensive evaluation at other physicians' offices and has been seen in the ER for this pain, but no etiology has been found. She has no other significant past medical history. What would be an important next step in her evaluation?

- a) Cardiac stress testing
- b) Colonoscopy
- c) Referral to a psychiatrist
- d) Referral to surgery for exploratory laparotomy
- e) Screening for domestic violence

During the exams, students are required to follow the examination protocol presented by the proctors. No specific questions regarding an exam item will be answered during any exam.

Examination Scoring: Scoring will be based solely on the answers recorded by the student on their laptop computer. Miskeying of answers will not be considered in grading a student's examination. Accuracy is the sole responsibility of the student.

Grades will be available via Blackboard in a timely fashion.

Viewing the Examination: All exams will be secure. Students will be informed of the time and place where a copy of the exam can be reviewed.

Grading Policy:

The course grade is made up of five components. An unsatisfactory grade for any of the five components will result in an unsatisfactory grade for the course

Component 1

Written Exams 150 points

Component 2

OSCEs 150 points

Component 3

Group Project 100 points

Component 4

Preceptor Evaluations Preceptors will provide narrative evaluation which will contain

notations as to whether the student's academic and professional performance is on the level of "honors" (H), "HIGH SATISFACTORY" (HS), "satisfactory" (S), "marginally satisfactory" (MS) and "unsatisfactory" (U).

Component 5
Small Group

Preceptors will provide narrative evaluation which will contain notations as to whether the student's academic and professional performance is on the level of "honors" (H), "high satisfactory" (HS), "satisfactory" (S), "marginally satisfactory" (MS) and "unsatisfactory" U.

When a student obtains a "MS" or "U" on any examination, a letter is sent to the student asking them to contact the course director for assistance. The letter is copied to the student's file.

9. Course grading scale:

The grading scale for the course is as follows:

(H) Honors	= or >93% and (H) in Preceptor Evaluations and Small Group
(HS) High Satisfactory	85% - 92.99% (H) or (S) in Preceptor Evaluations and Small Group
(S) Satisfactory	= or >75% and (S) or (H) in Preceptor Evaluations and Small Group
(MS) Marginal Satisfactory	= or >75% and (MS) in either or both Preceptor Evaluations and Small Group 70%-74.99% and (H), (S) or (MS) in Preceptor Evaluations and Small Group
(U) Unsatisfactory	= or >70% and (U) in either or both Preceptor Evaluations and Small Group <70% and (H), (S), (MS), or (U) in Preceptor Evaluations and Small Group

10. Policy on makeup tests, etc.

Exam Administration: All examinations will be administered in the Biomedical Sciences building on the dates and times documented in the examination schedule. A student must sit for all examinations as scheduled. A student must obtain permission for an excused absence from the course director and notify the Senior Associate Dean for Student Affairs prior to the time for sitting for a scheduled examination. In the event of a personal emergency, the course director and the Senior Associate Dean for Student Affairs must be notified of the absence as soon as possible. Missed examinations will be rescheduled at the discretion of the course director, at a time that does not interfere with other course work. Unexcused absences will result in a grade of zero (0) for the missed examination.

All absences from examinations should be documented by a PIR from the course director and will be communicated to the Office of Student Affairs. A record of excused and unexcused absences from examinations will be maintained by the Office of Student Affairs. A pattern of recurrent absences

from examinations, whether excused or unexcused, will be reviewed by the MSPPSC and may result in a recommendation up to and including dismissal from the FAU medical Education Program. (See Student Rights and Responsibilities Handbook)

11. Special course requirements:

Attendance Policy:

The FAU faculty and administration agree that student attendance and participation in all scheduled learning sessions are important to students' academic and professional progress and ultimate success as physicians.

Attendance at all activities is mandatory. **For an absence to be excused, a written or email request must be made to the Course Director(s).** Only a Course Director can excuse an absence. No missed work associated with a specific session can be made up without loss of credit for satisfactory completion unless an excused absence has been granted.

Repeated unexcused absences from required curricular activities may result in disciplinary action, up to and including dismissal from the FAU Medical Education Program.

12. Classroom etiquette policy:

Students should be considerate of each other by switching his/her cell phone to vibrate during all teaching activities.

If a telephone call is of an emergency nature and must be answered during class, the student should excuse him/herself from the lecture hall before conversing.

Laptop computer use should be limited to viewing and recording lecture notes rather than checking e-mail, playing or viewing other distracting websites. Students may be asked by faculty to turn off laptops during any session where group participation is required (such as PBL and wrap-up sessions).

13. Disability policy statement:

In compliance with the Americans with Disabilities Act (ADA), students who require special accommodation due to a disability to properly execute coursework must register with the Office for Students with Disabilities (OSD) –in Boca Raton, SU 133 (561-297-3880)—and follow all OSD procedures.

14. Honor code policy:

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

The FAU Honor Code requires a faculty member, student, or staff member to notify an instructor when there is reason to believe an academic irregularity is occurring in a course. The instructor must pursue any reasonable allegation, taking action where appropriate. The following constitute academic irregularities:

1. The use of notes, books or assistance from or to other students while taking an examination or working on other assignments, unless specifically authorized by the instructor, are defined as acts of cheating.
2. The presentation of words or ideas from any other source as one's own is an act defined as plagiarism.
3. Other activities that interfere with the educational mission of the University.

For full details of the FAU Honor Code, see University Regulation 4.001 at www.fau.edu/regulations/chapter4/4.001_Honor_Code.pdf.

In addition to the FAU Honor Code, the FAU College of Medicine has adopted specific academic, professional and behavioral standards governing medical student conduct which the FAU COM faculty and administration believe are essential components of medical education and the development of medical students. The FAU COM academic, professional and behavioral standards are included in the COM Student Handbook.

15. Required texts/readings

The following is a textbook that students are expected to purchase. Textbooks are available at the FAU Bookstore.

- Bickley, LS and Szilagyi, PG. *Bates' Guide to Physical Examination and History Taking (Eighth Edition)*. Philadelphia, PA: Lippincott Williams & Wilkins; 2003.

Suggested textbooks:

Every student should also plan to have access to a standard medical text such as Cecil's, Harrison's or Kelley's as well as access to notes and texts from the biomedical science and organ system courses.

- Smith, RC. *Patient-Centered Interviewing*. Philadelphia, PA: Lippincott Williams & Wilkins; 2001.
- Orient, JM. *Sapira's Art and Science of Bedside Diagnosis*. Philadelphia, PA: Lippincott Williams & Wilkins; 2000.
- Leblond, R., DeGowin, RL. and Brown, DD. *DeGowin's Diagnostic Examination*. McGraw-Hill; 2004.

Instruments:

The following should be purchased:

- Welch-Allyn Diagnostic Set with Coaxial Ophthalmoscope, Diagnostic Otoscope (Transilluminator is optional)
The Ophthalmology Department recommends that you purchase larger handle set.
- Pan-Optic Head (Optional)
- Two Headed (bell and diaphragm) Double Tube Stethoscope (suggested *Littman* or *Tycos* with ear pieces which fit your ears)
- Pen Light
- Pocket Eye Chart
- Tuning Fork (Frequency 128 Hz)
- Adult Babinski Reflex Hammer 10" (inches)
- Antiseptic handrub (pocket size, waterless)
- Blood Pressure Cuff (Optional)

16. Supplementary resources:

Clinical skills web resources:

(These resources may be accessed via the “*Handouts and links*” of the student e-Dossier on Blackboard)

Auscultation Assistant: <http://www.wilkes.med.ucla.edu/intro.html>

The Auscultation Assistant provides heart sounds, heart murmurs, and breath sounds in order to help medical students and others improve their physical diagnosis skills.

McGill University Virtual Stethoscope: <http://sprojects.mmi.mcgill.ca/mvs/>

In this educational resource you will find a tutorial on the physical exam with emphasis on auscultation, a brief review of selected cardiac and pulmonary physiology/pathophysiology topics, a virtual stethoscope interface for auscultating normal and abnormal cardiac and respiratory sounds, and powerful and interactive quizzes to help with mastery of the stethoscope (on-line only).

Loyola University Medical Education Network: Reviews components of the screening physical exam
<http://www.lumen.luc.edu/lumen/MedEd/MEDICINE/PULMONAR/PD/Contents.htm>

Heart Lab Cardiac Auscultation Simulator: <http://www.familypractice.com/heartlab/heartlab.htm>

Site allows you to select from the library of sounds to listen to accurate heart sounds on a simulated chest wall, review which maneuvers accentuate the sounds, locate where the sounds are best heard, and view a graphic representation of the sounds.

UC San Diego: A Practical Guide to Clinical Medicine

<http://medicine.ucsd.edu/clinicalmed/lung.htm>

A comprehensive physical examination and clinical education site for medical students and other health care professionals.

Blaufuss Multimedia Heart Sounds Tutorial: <http://www.blaufuss.org/tutonline.html>

University of Washington Heart Sounds and Murmurs:
<http://depts.washington.edu/~physdx/heart/demo.html>

UC Davis Review of Lung Sounds: <http://medocs.ucdavis.edu/IMD/420C/sounds/lngsound.htm>

R.A.L.E. Repository of Lung Sounds: <http://www.rale.ca/Repository.htm>

17. Web-based postings on Blackboard:

Students are encouraged to carry their laptop with them as much as possible in order to access resources, patient log and other resources.

Please refrain from checking personal e-mails during teaching periods. Please put your cell phone or pager on “vibrate” to minimize disruption.

Please be punctual as a courtesy to your colleagues and faculty.

Session handouts	Yes	Session Objectives	Yes	Quizzes	No
Required Activities	Yes	Grades	Yes	Additional Materials	Yes

18. Course topical outline:

Content outline:

Topics are organized within six threads:

1. **Communication:** Interviewing, history taking, psychiatric interviewing, sexual history taking, alternative medicine issues, cultural competency.
2. **Physical Exam:** Normal surface anatomy, normal adult and child examination, gynecologic examination, geriatric examination, clinical procedural skills.
3. **MD in Society:** Health care system, public health, bioethics, advocacy, public policy, international medicine, end of life care, domestic violence, preventive medicine.
4. **Quantitative Medicine:** Epidemiology, information management, biostatistics, evidence-based medicine (EBM), introduction to clinical investigation, critical appraisal, exposure to scholarly concentrations.
5. **Medical Practice:** Skills training, professionalism, exposure to specialists, continuity of care, interprofessional clinical teams, hospital information systems, clerkship mechanics.

6. **Clinical Correlation:** Multisystem problems, development of problem lists, differential diagnoses, integration of basic science concepts.

19. Study habits:

A major contribution to your learning is active engagement, which includes participation in the learning of other students and interaction with the instructors. Students are expected to be proactive and to access the Blackboard system to review items associated to individual sessions.

Learning in the field of medicine is a life-long endeavor that is not only necessary, but can and should be fun. One of the most important factors for learning is curiosity and sometimes, the best way to keep this curiosity stimulated is through our interaction with colleagues and peers. When learning in small groups, we have a chance to try to explain topics to each other, brainstorm solutions together, give each other constructive feedback, and support and validate each other. We encourage balancing studying alone with learning in small groups. It is important to develop a study routine to avoid “putting things off” and “cramming” and to minimize the stress we may add to our lives in that way.

20. Independent study time:

Independent Study Time allocated within the day time schedule is provided for students, on average about 9 hours per week.

Students are expected to use this time to further their learning. The time should be used for independent study or with peers. It is an opportunity to seek out faculty to interact with them outside the formal teaching setting. Since the PBL small-group format requires that students research learning objectives, the time may be used to prepare for the subsequent sessions. Finally, the time may be used to work on assignments, problem-solving cases, off-campus visits or other tasks that are required by the courses.

Occasionally, some Independent Study Time sessions may be used for curriculum-related activities (e.g. standardized examinations): notice will be given as early as possible for these occasions.

21. Course and faculty evaluation:

FAU highly values the process of formal program evaluation and feedback. FAU students are required to complete all course evaluations and program evaluation surveys which are the Students Perception of Teaching (SPOT).

Grades and transcripts may be held for failure to submit required surveys. Evaluations should be constructive, to help improve individual faculty’s teaching, and the content and format of the courses.

Moreover, the timely completion of evaluations at the level of undergraduate medical education assists students in developing the administrative and organizational skills required throughout their academic and professional career. We appreciate your completing evaluations to help continue with improvement of the learning experiences and environment for all students.

22. Faculty (in alphabetical order):