FLORIDA ATLANTIC UNIVERSITY™

Graduate Programs—NEW COURSE PROPOSAL

UGPC APPROVAL _____
UFS APPROVAL _____
SCNS SUBMITTAL _____
CONFIRMED _____
BANNER POSTED _____
ONLINE _____
MISC _____

DEPARTMENT NAME: Basic Science

COLLEGE OF: Charles E. Schmidt College of Biomedical Science

RECOMMENDED COURSE IDENTIFICATION:

PREFIX _____BMS_____ **COURSE NUMBER** ____6601_____ **LAB CODE** (L or C) _____

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

COMPLETE COURSE TITLE Fundamentals of General Pathology

EFFECTIVE DATE
(first term course will be offered)
Summer 2010

CREDITS: 2

TEXTBOOK INFORMATION:
Essentials of Pathology, 5th edition, by Emanuel Rubin MD & Howard M Reisner PhD.

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

COURSE DESCRIPTION, NO MORE THAN 3 LINES: The course covers the basic pathophysiology of mechanisms of disease in medicine and will incorporate gross pathologic, microscopic, and radiologic material to assist you in understanding fundamental disease.

PREREQUISITES W/MINIMUM GRADE:*	COREQUISITES:	OTHER REGISTRATION CONTROLS (MAJOR, COLLEGE, LEVEL):
		Graduate Students Only

PREREQUISITES, COREQUISITES & REGISTRATION CONTROLS SHOWN ABOVE WILL BE ENFORCED FOR ALL COURSE SECTIONS.
**DEFAULT MINIMUM GRADE IS D-.*

MINIMUM QUALIFICATIONS NEEDED TO TEACH THIS COURSE:
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.
Department of Biology

Morton Levitt, MD, M.H.A., FCAP, mlevitt3@fau.edu; tel: 297-0911

Faculty Contact, Email, Complete Phone Number

SIGNATURES

SUPPORTING MATERIALS

Approved by:	*Date:*
Department Chair:	3-16-10
College Curriculum Chair:	3-16-10
College Dean:	3-16-10
UGPC Chair:	
Dean of the Graduate College:	

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.

Fundamentals of General Pathology

Course number: BMS 6601

Pre-requisites: None
Co-requisites: None

Instructor: Dr. Morton H. Levitt
Office: BC 71, Room 118
Tel: (561) 297-0911.
E-mail address: mlevitt3@fau.edu
Please feel free to stop by the office [Room 118] at any time.

Required Textbook
Essentials of Pathology, 5th edition, by Emanuel Rubin MD & Howard M Reisner PhD.

Bibliography
Fuster V, Badimon L, Badimon JJ, Chesebro JH. The pathogenesis of coronary artery disease and the acute coronary syndromes. New England Journal of Medicine. 1992;326:242-250 and 310-318.

Strong JP. Atherosclerotic lesions: natural history, risk factors, and topography. Arch Pathol Lab Med. 1992;116:1268-1275.

Ross R. Atherosclerosis--an inflammatory disease. N Engl J Med. 2000;340(2):115-26. Review.

Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults. Executive summary of the third report of the national cholesterol education program. JAMA. 2001;285:1486-2497.

Computer Resources

Multimedia exercises covering the small groups/laboratories/PBLs, as well as images supporting the lecture and syllabus materials, and the examination question banks, are available via the World Wide Web at:
http://library.med.utah.edu/WebPath/webpath.html#MENU

Syllabus - Electronic

The "Course Documents" section in Blackboard includes an electronic version of the study notes (included in this Syllabus) for each lecture. The "Powerpoint Lectures" section has an electronic version of the PowerPoint lectures for the course. These are designed to supplement and organize the material in the textbook and the study notes, but not be a complete substitute for it.

Course Description

The Fundamentals of General Pathology course in the summer semester covers the basic pathophysiology of mechanisms of disease in medicine. The knowledge gained from

study of these basic mechanisms can be applied to other disciplines in the biomedical sciences. This pathology course will incorporate gross pathologic, microscopic, and radiologic material to assist you in understanding fundamental disease. The knowledge gained from a study of pathology will integrate with other courses to provide you with the means for conducting future basic science and translational research as well as provide the basis for future medical, dental, veterinary, and allied health education.

Instructional Objectives

1. Demonstrate knowledge of general categories of disease conditions.
2. Develop a vocabulary that allows for description of disease processes and communicating findings to other research and clinical scientists.
3. Demonstrate knowledge of the molecular and cellular basis for inflammatory disease states.
4. Demonstrate knowledge of the molecular basis for neoplastic diseases.
5. Demonstrate knowledge of the pathophysiology of common pathologic conditions.
6. Demonstrate the ability to recognize abnormal gross and microscopic findings in the context of a common clinical disease example.
7. Demonstrate a basic knowledge and interpretation of laboratory findings associated with disease conditions.
8. Demonstrate professionalism in working with colleagues and faculty.
9. Demonstrate knowledge of fundamental mechanisms of cell injury, repair and adaptation.
10. Demonstrate knowledge of common neonatal, pediatric and congenital diseases and their diagnosis.
11. Demonstrate knowledge of the pathogenesis and immunologic aspects of aging and principles of aging at the clinical, cellular and sub-cellular levels.

Method of Instruction

- **Lectures / Discussions / Tutorials**
  Check locations for lectures in your master schedule, which is posted on the Blackboard site. See the course schedule for dates and times. Note that due to room scheduling conflicts and other exingencies, the schedule is subject to change and the student is advised to check the electronic version of the schedule frequently. Changes in the schedule will also be e-mailed to the class. The lectures are designed to cover the course content in an organized fashion, illustrating the concepts and allowing time for you to ask questions. There are 18 lecture and 4 laboratory hours.
- **Faculty** From time to time, guest lecturers and facilitators are invited to participate in the course.
- **Laboratory Exercises**
  Check the schedule for times and locations. There are 4 laboratory hours.

SCHEDULE & TABLE OF CONTENTS

		Rubin Essentials, (5th ed). Required Reading	Date of Activity
Topic	Lecture Handouts and Notes Pages	Textbook Reading	All activities are 1:00 - 3:00 PM
Introduction to the Course	pp 4-9	p (1)	Mon June 28
Cell Injury & Aging	pp 10-21; 149-155	pp (1-17)	Mon June 28
Acute & Chronic Inflammation	pp 22-35	pp (18-35)	Wed Jun 30
Tissue Renewal & Repair	pp 35-42	pp (36-52)	Mon July 5
Hemodynamic Disorders, Thrombosis, and Shock	pp 43-54	pp (117-130)	Wed July 7
Genetic Disorders	pp 86-117	pp (92-101;103-105;108-116)	Mon July 12
Quiz & Lab #1			Wed July 14
Mid Term Examination & Exam Review			Mon July 19
Neoplasia I	pp 70-85	pp (71-91)	Wed July 21
Neoplasia II	pp 70-85	pp (71-91)	Mon July 26
Nutrition & Environmental Diseases	pp 118-148	pp (131-147)	Wed July 28
Quiz & Lab #2			Mon Aug 2
Diseases of Blood vessels	pp 55-69	pp (195-205)	Wed Aug 4
Final Examination & Course Evaluations			Mon Aug 9
Final Exam Review			Mon Aug 9

Assessment Procedures: Examinations/Grading

The material for examinations and quizzes will come from lectures, lecture notes, and laboratory exercises and the textbook.

The format for the two examinations will be as follows:

- Written examination items: multiple choice questions (single best answer and extended matching).
- Practical examination items: multiple choice (single best answer) questions based upon illustrations of gross and microscopic lesions or charts and graphs, from material covered in laboratories, small groups, PBLs, and lectures.

The final grade in PCB 6933 will be determined as follows:

75% Exams (2 exams)
25% laboratory & quizzes (2 quizzes)

100%

Grading criteria:

A+	97-100
A	94-96
A-	90-93
B+	87-89
B	84-86
B-	80-83
C+	77-79
C	74-76
C-	70-73
D+	67-69
D	64-66
D-	60-63
F	<60

The following Attendance, Remediation, Honor Code, and ADA policies will apply:

STUDENT CODE OF CONDUCT REGULATIONS

Responsibility and Discipline

Florida Atlantic University is dedicated to the intellectual, social, and moral development of students in order to provide responsible leaders who can work effectively in a democratic society.

Under the authority granted by the Florida Board of Governors, the University has the right and responsibility to determine who shall be admitted to the institution, the conduct or behavior acceptable to the institution, and under what conditions one may continue as a student. As a condition for admission to the University, students agree to abide by the policies and regulations of the institution. The president of the University has responsibility for student conduct and discipline. That responsibility shall be exercised through the University Student Code of Conduct (Regulation 4.007).

Every student is subject to federal and state law, respective county and city ordinances, and all Florida Board of Governors and University rules and regulations. Violations of these laws, ordinances, or rules and regulations may subject the violator to appropriate disciplinary action by University authorities.

The president or approved designee shall have the authority, after notice to the student of the charges and a hearing thereon, to expel or otherwise discipline any student who shall be found to have violated a rule or regulation of the Florida Board of Governors or the University or any law or ordinance.

The president or approved designee shall have the authority to order any student to cease and desist any activity, which in the president's or designee's judgment, disrupts the orderly operation of the institution. Any student failing to abide by the cease and desist order shall be subject to interim suspension pending a hearing.

The conviction of a student for a criminal offense of a kind that interferes with the educational or orderly operation of the University or of a kind which, if the student were allowed to remain enrolled, would endanger the health, safety or property of members of the academic community, shall be sufficient grounds for expulsion or other disciplinary action against such student.

Except as provided above, in all student violations of nonacademic rules and regulations, a student shall be afforded adequate notice of charges, a reasonable time to answer, a fair and impartial hearing, and a decision. The final administrative appeal shall be to the president or approved designee who may reopen the hearing, order a new hearing or accept determination of sanctions. In the conclusion of the appeal process, the decision of the president or president's designee shall be final. For full details of the FAU Student Code of Conduct, see University Regulation 4.007.

Attendance Policy

We believe that:

Professionalism is a major component of our 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 laptop computers and other electronic devices 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 (lectures, labs, quizzes and examinations, computer sessions, etc.).

Unexcused absences reflect negatively on the goals and objectives of the graduate 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 graduate 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 Course Director. 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.

Procedure for Notification of Absence

If the student knows in advance of an upcoming legitimate absence, he or she should communicate with the course director. 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.

If the absence occurs due to an unforeseen emergency, the student should contact the course director 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.

Unexcused Absences

For PCB 6933, students with more than 2 such absences in the Summer Term will not receive academic credit for the course and a grade of "F" will be submitted to the Registrar. Students who have an unexcused absence from an examination or a quiz will lose the entire score (points) awarded for that examination or quiz, and the final grade for the course will reflect this loss.

Remediation Policy for Absences from Examinations and Quizzes

The remediation policies for absences from examinations and quizzes are:

1. POLICY ON MISSED EXAMINATIONS: Students are required to take examinations. A student can only be excused from an examination by a course director decision based on the personal situation of the student. **All examinations must be made up within 1 week of returning to class.** The Course Director will determine the time of the exam make-up session. The student will be given the same examination given to the other students.

2. POLICY ON MISSED QUIZZES: Students are required to take both scheduled quizzes in this course. A student can only be excused from a quiz by a Course Director decision based on the personal situation of the student. The student must make arrangements with the Course Director to make up a missed quiz. **All quizzes must be made up within 1 week of returning to class.** The student will be given the same quiz given to the other students.

Academic Honor Code:
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.

Students With Disabilities

In compliance with the American 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) – in Boca Raton, SU 133 (561-297-3880); in Davie, MOD 1 (954-236-1222); in Jupiter, SR 117 (561-799-8585); or at the Treasure Coast, CO 128 (772-873 3305) – and follow all OSD procedures.

Syllabus prepared and edited by: Morton H. Levitt, M.D., M.H.A., FCAP

Fundamentals of General Pathology
Course number: BMS 6601

Rudolf Virchow (1821 - 1902)

"Epidemics resemble great warning signs on which the true statesman is able to read that the evolution of his nation has been disturbed to a point which even a careless policy is no longer allowed to overlook."

Rudolf Ludwig Karl Virchow (1821-1902) was born in the small Pomeranian city of Schivelbein, Germany. His early life was in a modest, rural background which he never completely forgot. As a young man he set a gigantic goal for himself: "An all-around knowledge of nature, from the deity down to the stone."

He was educated at the Friedrich-Wilhelms Institut in Berlin which provided medical education for gifted boys in return for service in the Army.

Virchow's early interest and direction was in epidemiology and the history of disease. As a young man, he was an experimentalist (embolism) and biochemist (amyloid, haematoidin, myelin), but his interest turned and developed in microscopic pathology. He became a great oncologist, and his pathological studies made him an important biologist.

Virchow laid the foundation for modern pathology. In 1858 at the age of twenty-six he published "Die Cellularpathologie in ihrer Begründung auf physiologische und pathologische Gewebelehre." The results of his investigations on thrombosis and embolism and the essence of Virchow's doctrine: "with his immortal aphorism 'omnis cellula e cellula' " were published in two articles that revolutionized thinking in the medical field. Medicine in Germany turned from "romantic" to modern as observation of clinical findings became the standard. His important discoveries in parasitology and his social approach in medicine and epidemiology set a new standard as a pioneer in modern public health.

Virchow's notable reputation developed from his "civic courage." He fought against militarism, Anti-Socialist Laws, and Anti-Semitism. At his death Germany complained that she lost four great men in one: her leading pathologist, her leading anthropologist, her leading sanitarian, and her leading liberal.[1]

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[1]Sources: 1) Rudolf Virchow Doctor Statesman Anthropologist by Erwin H. Ackerknecht, The University of Wisconsin Press, Madison, 1953; 2) Selected Readings in Pathology From Hippocrates to Virchow, edited by Esmond R. Long, Charles C. Thomas, Springfield, Illinois/Baltimore, Maryland, 1929.

Julie Sivigny

From: David Binninger [binninge@fau.edu]
Sent: Wednesday, March 17, 2010 11:47 AM
To: Julie Sivigny
Cc: Rodney Murphey
Subject: Fwd: Biomedical Science New Course Proposals

Good morning,

I circulated the syllabi for the new courses listed in your e-mail (see below) to the faculty who could make comments. I did not receive any responses that raised questions or noted a significant overlap with any of our graduate courses. Please let me know if you have any questions.

I hope this is helpful and good luck with the remainder of the process toward approval of the courses.

Regards,
David

David M. Binninger, Ph.D.
Associate Professor and Associate Chair
Department of Biological Science
and
Center for Molecular Biology and Biotechnology
Florida Atlantic University
777 Glades Road
Boca Raton, FL 33431 USA
Phone: (561) 297-3323
FAX: (561) 297-2749

Begin forwarded message:

From: Julie Sivigny <jsivigny@fau.edu>
Date: March 15, 2010 1:38:27 PM EDT
To: 'David Binninger' <binninge@fau.edu>
Subject: Biomedical Science New Course Proposals

Dear Dr. Binninger,
Thank you for your assistance with this process. We are submitting a total of 10 new course proposals and 2 changes. All syllabi were forwarded to Dr. Murphey but in multiple batches so if you are missing any please let me know and I'll send to you immediately.

Biomedical Science New Course Proposals:
Host Defense & Inflammation – Dr. Yoshimi Shibata
Molecular Neuropsychopharmacology – Drs. Isgor and Tao
Macromolecules and Human Disease – Drs. Brew and Li
Adult Neurogenesis – Dr. Jianning Wei
Molecular Basis of Disease & Therapy – Dr. Caputi

Tumor Immunology – Dr. Vijaya Iragavarapu
Molecular Genetics of the Cell – Dr. Kantorow
Molecular Basis of Human Cancer – Dr. Lu
Problem-based Immunology – Dr. Nouri-Shirazi
Fundamentals of General Pathology – Dr. Levitt

The integrated morphology courses will be processed as changes. We previously offered two 3-credit courses: Human Gross Anatomy – Trunk and Human Gross Anatomy – Extremities. We are changing these to 4-credit courses with the titles *Integrated Morphology I and II* taught by Drs. Willis Paull, Rainald Shmidt-Kastner and Deborah Cunningham.

The graduate college submission deadline is Wednesday March 17th at noon. I apologize for the lateness of some of these requests and appreciate your effort to assist us.

Please let me know if I can provide any additional information.
Thank you.
Julie

Julie A. Sivigny
Academic Program Specialist
Charles E. Schmidt College of Biomedical Science
Florida Atlantic University
(561) 297-2216

From: David Binninger [mailto:binninge@fau.edu]
Sent: Monday, March 15, 2010 11:16 AM
To: Julie Sivigny
Cc: Rodney Murphey; Jay Lyons
Subject: Fwd: Biomedical Science New Course Proposal - Macromolecules & Human Disease

Good morning Julie,

I forwarded the syllabi for the new courses to the appropriate faculty last week. It's my opinion that there will not be any issues or conflicts. So far, I have had only one response and that was that there were no concerns. Please confirm the full list of new courses and when you need a statement from me.

I hope this is helpful and please let me know if you have any questions.

Regards,
David

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and
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