

**BMS 6602** 

Pathology 202

Spring 2014

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### **Instructors**

**Course Director** 

Jose Diaz, M.D., Ph.D.

Room 2350-K

Office Hours: 8am-6pm (12-2:00 pm preferred) by appointment.

jose.diaz@med.fsu.edu (Please contact by email)

Faculty

John Blackmon, M.D. (Assistant Course Director)

Office Hours: 8am-6pm (12-1:00 pm preferred) by appointment.

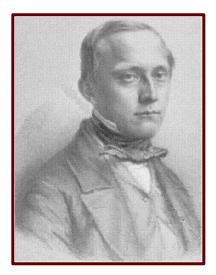
john.blackmon@med.fsu.edu (Please contact by email)

**Facilitators** 

Small group facilitators are drawn from the FSUCOM faculty

#### **Course Overview**

#### Course Goals



**Rudolf Virchow (1821 - 1902)** 

Virchow was called the "Pope" of Medicine and is considered the father of Pathology and modern medicine. His dictum "all cells come from other cells" altered the scientific views and the direction of medicine at the time. He established the "cellular theory" as the origin of disease and thought disease was produced by disturbances in the structure and function of cells.

The Pathology 202 course in the spring semester covers the pathophysiology of disease in medicine by organ systems for all the organs (Systemic Pathology), except for the cardiovascular and respiratory systems which were already covered in the Pathology 201 course. Material from the systemic pathology lectures and small group discussions will be used to elaborate further about the general pathology/pathophysiology principles learned during the Pathology 201 course. There is no specific section for Laboratory Medicine in this course. However, all important laboratory tests, the interpretation of their results and the guidelines for its appropriate and cost-effective ordering are covered in the lectures and the small group discussions about each organ system in the Pathology 202 course (also in Doctoring) for each specific disease. The knowledge gained from the study of organ system diseases correlates with other courses during the semester, particularly with Doctoring and will be applied to clerkships in the 3rd and 4th years. This course will incorporate gross pathologic, microscopic, laboratory, radiologic, and other material to assist you in understanding the disease processes and prepare you for licensing examinations as well as provide you with a foundation for future patient care. In summary, the knowledge gained from the study of pathology will integrate with other courses to provide you with a foundation for future patient care.

### Learning Objectives

#### Demonstrate knowledge, skills or ability on the following:

- 1. Demonstrate knowledge of the molecular, genetic and cellular basis for the diseases affecting the organ systems covered in this course.
- 2. Demonstrate knowledge of the pathophysiology of the conditions encountered in clinical practice for all the organ systems covered in this course.
- 3. Demonstrate the ability to recognize abnormal gross and microscopic findings in the context of the clinical problem for all the organ systems covered in this course.
- 4. Demonstrate the ability to interpret laboratory findings associated with the disease conditions for all the organ systems covered in this course and be able to use the laboratory for diagnostic purposes, including indications for ordering and proper specimen collection.
- 5. Demonstrate knowledge of the appropriate application of autopsy and surgical pathology findings to quality assurance for improvement of clinical practice.
- 6. Demonstrate the ability to form differential diagnoses based upon pathologic findings.
- 7. Demonstrate knowledge of the use of clinical-pathologic correlation to understand disease conditions.
- 8. Demonstrate knowledge of the radiologic findings that accompany pathologic lesions affecting the organ systems covered in this course.
- 9. Demonstrate problem solving ability when presented with patient scenarios including pathologic findings.
- 10. Demonstrate skills in evidence-based medicine to obtain information involved in solving case-based problems.
- 11. Develop the ability to meet compliance standards when ordering laboratory tests.
- 12. Demonstrate professionalism in working with colleagues and faculty.
- 13. Demonstrate an attitude of care and concern for patients and their families affected by pathologic disease states.
- 14. Treat patients, as represented by laboratory, pathology, and radiologic specimens and records, with respect, dignity, and confidentiality.
- 15. Locate appropriate resources (e.g. journal articles) and apply the information to small group cases and other pathologic discussions/study.

#### Course Format

#### Lectures/Discussions/Tutorials

Check locations for course activities in class calendar on Outlook. Materials for these events can be found on the course Blackboard site. The schedule is subject to change and the student is advised to check the online calendar frequently. Announcements of changes in the schedule will be posted on Blackboard and also be e-mailed to the class. Lectures are designed to cover the course content in an organized fashion, illustrating the concepts and allowing time for you to ask questions.

#### **Small Groups Discussions (SG)**

Attendance to all small group sessions is mandatory. Check the schedule for times and locations. Your assignment to one of the LC team rooms will be posted on Blackboard. To encourage more active participation among students, one student will act as a *team leader* for each particular session. Students will rotate to take this role. The student leaders will be appropriately instructed in a **preview session** and supervised by a *faculty facilitator* (one faculty for each LC rotating through the small rooms). The last 40 minutes of each small group discussion will be a wrap up session given by faculty in the lecture room. Attendance to the wrap up session is encouraged but is not mandatory. This is recorded and posted online.

Small group sessions are not video recorded, are very interactive and constitute a unique experience that must be experienced in real time. While initial learning occurs by attending/reviewing and reading lecture and text book materials, the SG discussions are the "application" phase of the learning process and as such, reinforce and place into clinical context your knowledge and provide a unique opportunity for testing your skills and proficiency in some of the competency domains: 1) patient care, 2) medical knowledge and 3) communication skills. While it is not possible to be professionally competent without adequate knowledge, knowledge alone does not guarantee competency, which is the practical translation of medical knowledge and many additional skills necessary to practice medicine with the highest standards. In addition, some questions on the quizzes could be based on the cases discussed during the small group sessions.

Small group sessions are based on a "case presentation" model. These sessions test your knowledge and reasoning in a simulated environment closely resembling real clinical situations. These sessions are a unique opportunity to apply your knowledge while interacting with faculty and other students. Students will be evaluated by the student team leader and by faculty for attendance and performance, including professionalism. Students acting as leaders will also be independently evaluated for performance and professionalism by assigned faculty. An unexcused absence attendance to the SG discussions or the corresponding preview session for those acting as student leaders on a particular session will be reported by the course coordinator to Student's Affairs. Lack of attendance which is not excused from Student's Affairs will be entered on your personal records. More than two unexcused absences from SG sessions will result in a "Fail" grade for the course. While attendance to all SG sessions in the LC is required, attendance to the wrap up sessions in the lecture room is at your discretion. The wrap-up sessions are recorded. You may choose to attend the session in real time or review the on-line version.

#### Clinical-Pathologic Correlation (CPC)

The CPC is comprised of cases presented by groups of four to five medical students in a 30 minute formal presentation according to the following format:

- 1. Case history, workup tests as per differential diagnosis and final diagnosis
- 2. Symptoms in a typical case
- 3. Pathophysiology of the disease
- 4. Epidemiology (occurrence, routes of transmission, prevalence, etc.)
- 5. Prognosis

A group of faculty (pathologists/clinicians) and students will attend the presentations and evaluate the performance. Satisfactory attendance and performance as a presenter of a CPC or as an audience member is necessary to pass the Pathology 202 course. Therefore, CPC attendance and performance are assessed collectively. Each SG is randomly divided in two groups of four to five students working together on the same topic and presentation. While a given group is presenting for 30 minutes, the remaining students from the same LC are required to attend and evaluate the presentation. Therefore, each group is required to present once and to attend the five presentations from the other five groups from the same LC. Four sessions lasting 3 hours (six presentations lasting 30 minutes each) will occur during the Pathology 202 course. Each student will be assigned to the corresponding LC event to present and attend all other presentations given on that session.

# Competencies

FSUCOM – Competencies –Pathology 202BMS 6602		
Competency Domains	Competencies Covered in the Course	Methods of Assessment
Patient Care		
Medical Knowledge	Recognize and discuss the implications of altered structure and function (pathology and pathophysiology) of the body and its major organ systems in common diseases and conditions. Identify changes in the structure and 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.  Describe the molecular basis of diseases and the way in which they affect the body (pathogenesis).	Internal Exams, Quizzes, NBME Comprehensive Basic Science Exam, and problem solving in SG
	Demonstrate the ability to apply knowledge to analyze and solve problems related to the diagnosis, treatment, and prevention of disease.  Recognize the implications of cultural, social, economic, legal, and historical contexts for patient	discussions
	care.  Demonstrate the appropriate use of laboratory tests in making diagnostic and treatment decisions	
Practice-based Learning		
Communication Skills	Demonstrate the ability to work and communicate effectively in teams.	Small group problem solving isessions and CPCs; observation by faculty facilitators, course directors; peer evaluation
Professionalism	Demonstrate professionalism and high ethical standards in all aspects of the course.	Observation by faculty facilitators, course directo peer evaluation
System-based Practice		

#### **Policies**

#### Americans with Disabilities Act

Candidates for the M.D. degree must be able to fully and promptly perform the essential functions in each of the following categories: Observation, Communication, Motor, Intellectual, and Behavioral/Social. However, it is recognized that degrees of ability vary widely between individuals. Individuals are encouraged to discuss their disabilities with the College of Medicine's <u>Director of Student Counseling Services</u> and the FSU Student Disability Resource Center to determine whether they might be eligible to receive accommodations needed in order to train and function effectively as a physician. The Florida State University College of Medicine is committed to enabling its students by any reasonable means or accommodations to complete the course of study leading to the medical degree.

#### The Office of Student Counseling Services

Medical Science Research Building, G146
Phone: (850) 645-8256Fax: (850) 645-9452

This syllabus and other class materials are available in alternative format upon request. For more information about services available to FSU students with disabilities, contact the:

#### **Student Disability Resource Center**

97 Woodward Avenue, South Florida State University Tallahassee, FL 32306-4167 Voice: (850) 644-9566

TDD: (850) 644-8504 sdrc@admin.fsu.edu

http://www.fsu.edu/~staffair/dean/StudentDisability

#### 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. (Florida State University Academic Honor Policy)

### Attendance Policy

The College of Medicine has detailed attendance policies as they relate to each cohort and events that conflict with course schedules. See pages 28-29 and 43-44 of <u>FSUCOM Student Handbook</u> for details of attendance policy, notice of absences and remediation.

Unexcused absence from a scheduled examination or quiz may result in a score of zero (0 %) being assigned for that assessment. Unexcused absence from any activity for which attendance is required may require remediation and be considered a Professionalism concern (see Grading System, below).

### **Required Materials**

PATHOLOGIC BASIS OF DISEASE, 8<sup>th</sup> edition, by Robbins and Cotran.

PLEASE NOTE THAT STUDENTS ARE EXPECTED TO READ THE TEXTBOOKS. POWERPOINT SLIDES WILL NOT SUBSTITUTE FOR THE REQUIRED READINGS.

PowerPoint presentations from lectures can be found in the Course Content section of Blackboard. These are designed to supplement and organize the material in the textbook only. **Reading the assigned chapters in Robbins is required, and students are responsible for the content in these chapters**. PowerPoints posted in advance of a lecture do not reflect last moment changes or corrections that may occur from time to time. Thus the official version is the one available when the lecture begins. **Copyright and other restrictions may prevent some images and other materials shown in lecture from being distributed on Blackboard**.

## **Suggested Materials**

Robbins and Cotran REVIEW OF PATHOLOGY, 3rd Edition, by Klatt and Kumar

WebPath, the Internet Laboratory for Pathology Education is highly recommended for supplementation of the materials in the textbook, lecture materials, small group discussions and problem based learning (PBL) exercises. See link below

http://library.med.utah.edu/WebPath/webpath.html

#### **Assignments**

The material for examinations and quizzes will come from lectures, SG sessions, and the textbook.

Written examination items will include multiple choice questions (single best answer and extended matching) based upon illustrations of gross and microscopic lesions, radiologic images, charts, graphs, or drawings, from material covered in small group discussions, textbooks, and lectures.

#### **Block Examinations**

There will be four (4) integrated block examinations in the fall semester. These examinations will cover material in all the Year 2 courses for the four to five weeks prior to each examination. The pathology examination items will be multiple choice questions (single best answer and extended matching) and may include questions based upon illustrations of gross and microscopic lesions, radiologic images, charts, graphs, and drawings.

Exam	Topic
Block 5	Urinary System, Digestive System
Block 6	Female and Male Reproductive System, Endocrine System and Head and Neck
Block 7	Hematology, Musculoskeletal System: bone, soft-tissues and muscle
Block 8	Central and Peripheral Nervous System, Eye and Skin

#### Quizzes

There will be 4 integrated quizzes, approximately 1 per block. Quizzes will test only the materials (lectures and SG discussions) covered in the current block given during the two weeks previous to the quiz. Quizzes are formative and will not contribute to the final exam average.

### Final Comprehensive Exam

There will be a final comprehensive exam (covering both fall and spring semesters), which will be the NBME Comprehensive Basic Science Exam.

### **Small Group Sessions**

Satisfactory performance is defined as being present and punctual to each assigned activity, staying engaged during the session, listening respectfully to others and contributing regularly, exhibiting understanding of the topics by previous review of the assigned materials (lecture PowerPoints and reading of text book chapters or any other assigned readings) and demonstrating analytical thinking ability. In addition, the student acting as a team leader will be evaluated by the assigned faculty for compliance with the goals and objectives of the particular SG discussion he/she is leading, which are discussed during the preview session that precedes each SG discussion.

### Clinical-Pathologic Correlation (CPC)

Each student will take part in one Clinical-Pathologic Correlation (CPC) exercise and will receive the same score as the whole group based on the following scale: 1-Unsatisfactory 2-Satisfactory and 3-Outstanding. A score of Satisfactory or better is required to pass the course. Students are required to all five CPC presentations from his/her assigned LC.

### **Grading Scale**

FSU COM has adopted a pass/fail grading system which is used in the curriculum for the first and second years (See <u>page 31</u> of Student Handbook). To achieve a grade of Pass in BMS 6602 (Pathology 202) a student must meet <u>all</u> of the following requirements:

- A final average ≥ 70% on the total of all examination questions (Quizzes are formative and do not contribute to the final average). An average below 70% will receive a grade of Fail which will require remediation or repetition of the course, as determined by decision of the Student Evaluation and Promotion Committee.
- 2) A student whose performance is <70% (below passing) on any individual exam during the semester is required to
  - a. Attend the exam review
  - b. contact the course director within 24 hours of that review, and
  - c. meet with the course director. Students may be asked to complete a Performance Improvement Program, the purpose of which is to assist the student in developing the skills and habits necessary to succeed in the curriculum as well as to address specific performance deficits.
- 3) Attendance and satisfactory participation in all required sessions (SG and CPC), as determined by the Course Director. Unexcused absence from a mandatory activity may require remediation as determined by the course director. Multiple unexcused absences from required activities will be considered a Professionalism concern.
- 4) Satisfactory completion of all assignments, as determined by the Course Director. Assignments may include preparation and performance as a small group leader, and/or preparation and presentation of 1 CPC session or attendance to corresponding CPC presentations from the same LC.
- Demonstration of the attitudes and behaviors of Medical Professionalism in all aspects of the course.

Students who receive a grade of Fail are required to successfully remediate or repeat the course. This determination will be made by the Student Evaluation and Promotion Committee in consultation with the Course Director.