



The Florida State University  
College of Medicine

# Medical Pharmacology 202

**BMS 6402**

**Spring 2016**

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# Instructors

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## *Course Director*

### **Gail T Galasko, Ph.D.**

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Office Hours: By appointment

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Email: [gail.galasko@med.fsu.edu](mailto:gail.galasko@med.fsu.edu)

## *Faculty*

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## *Faculty and Course Evaluation*

Students will have the opportunity to evaluate each faculty member who teaches a major portion of the course, using a standard evaluation questionnaire. Students will also have the opportunity to evaluate the course at its conclusion. Suggestions and comments concerning the course, its material and conduct, are welcomed and may be made to the course director at any time.

# Course Overview

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## *Course Goals*

Building upon the principles learned in Medical Pharmacology 201, students study in detail the pharmacologic agents used in treating disorders of organ systems. Drug classes, interactions, and specific usages with functional and clinical applications are presented with relevant clinical examples, including the use of therapeutic drug monitoring. Groups of drugs specifically considered include renal, gastrointestinal, hormonal, hematologic, analgesic, local anesthetic, central nervous system, ophthalmic, and dermatologic agents.

## *Learning Objectives*

**The student should exhibit the following knowledge, skills, and behaviors:**

1. Demonstrate knowledge concerning each major drug class discussed in the course, including:
  - a. Mechanism(s) of action
  - b. Therapeutic uses
  - c. Major adverse effects
  - d. Important drug interactions
  - e. Prototype drug(s)
2. Demonstrate knowledge of the variations in drug response between individual patients, based upon disease, age, genetic traits, or other innate characteristics
3. Demonstrate knowledge of the effect of age on pharmacodynamics, pharmacokinetics, and responses to therapy, with emphasis on geriatric patients
4. Develop an adequate basis of knowledge in pharmacology on which to build as the student advances through the clinical clerkship rotations
5. Develop knowledge of drug classes and mechanisms into which additional drugs can be incorporated, compared, and contrasted as new drugs become available and as the practice of medicine dictates.
6. Demonstrate an understanding of the general types and clinical usage of drugs for treating diseases of each organ system
7. Demonstrate the ability to recognize and understand the physicochemical and physiological factors that affect the absorption, distribution, metabolism, and elimination of drugs
8. Demonstrate an understanding of drug-receptor interactions and allied molecular phenomena at a basic level
9. Demonstrate an ability to interpret and analyze literature related to drugs
10. Demonstrate professional behavior during activities in the course by being prepared, in attendance when required, on time, attentive, and a considerate and active participant in discussions.

## Course Format

The course consists of lectures, clinical discussion-tutorial sessions, SP small groups and integrated small groups or clinical case presentations.

## Competencies

<b>FSUCOM – Competencies - BMS 6402</b>		
Competency Domains	Competency-based Objectives	Methods of Assessment
<b>Patient Care</b>	Demonstrate knowledge of the variations in drug response between individual patients, based upon disease, genetic traits, age, or other innate characteristics.	SP small groups, small and large group case studies, quizzes and examinations
<b>Medical Knowledge</b>	Demonstrate knowledge of each major drug class discussed in the course, including prototype drug(s), mechanism(s) of action, important adverse effects, and therapeutic actions and applications for treating diseases of each organ system. Recognize and describe the factors that affect the absorption, distribution, metabolism, and elimination of drugs. Demonstrate the ability to interpret dose-response relationships. Describe drug-receptor interactions and allied molecular phenomena at a basic level.	SP small groups, small and large group case studies, quizzes and examinations including NBME Comprehensive Basic Science exam.
<b>Practice-based Learning</b>	Demonstrate an adequate knowledge base in pharmacology to advance to the clerkship rotations	SP small groups, top 100 prescription drugs, quizzes and exams
<b>Communication Skills</b>	Demonstrate communication and team work skills	SP small group exercises and large group discussions
<b>Professionalism</b>	Demonstrate professional behavior during activities in the course by being in attendance when required, on time, attentive, and a considerate and active participant in discussions	Course Director observation, SP observation during small groups.
<b>System-based Practice</b>		

# Policies

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## *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 [Director of Student Counseling Services](#) 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) 645-8256 Fax: (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**

874 Traditions Way, 108 Student Services Building

Florida State University

Tallahassee, FL 32306-4167

Voice: (850) 644-9566 TDD: (850) 644-8504

[sdrc@admin.fsu.edu](mailto:sdrc@admin.fsu.edu)

## *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. Students are responsible for reading the [Academic Honor Policy](#) and for living up to their pledge to "...be honest and truthful and...[to] strive for personal and institutional integrity at Florida State University."

## *Attendance Policy*

The College of Medicine has detailed attendance policies as they relate to each cohort and events that conflict with course schedules. See [FSUCOM Student Handbook](#) for details of attendance policy, notice of absences and remediation.

**For BMS 6402: Unexcused absence from a scheduled examination may result in a grade of zero (0 %) being assigned for that examination. Unexcused absence from an activity for which attendance is required (for example, small group session or quiz) may be considered as an issue of Professionalism (see Grading System below) and may require remediation as decided by the course director.**

## Required Materials

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### *Required Textbook*

[Basic and Clinical Pharmacology](#), B.G. Katzung, ed. (Available online through the COM Medical Library)

### *Required Website*

[The Medical Letter on Drugs and Therapeutics](#) (**required**, subject to examination) (on [Medical Library webpage](#) Pre-Clerkship Resources, Support Materials Tab)

## Suggested Materials

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### *Recommended Textbook*

[Goodman and Gilman's The Pharmacological Basis of Therapeutics](#), 12<sup>th</sup> ed. L.L. Brunton et al., eds., 2011. (Available online at COM Medical Library webpage under "E-Books", in the "Pharmacology" listing)

### *Recommended Review Books*

[Katzung & Trevor's Pharmacology Examination and Board Review](#), 10<sup>th</sup> ed., A.J. Trevor et al. eds., 2012. (An extensive review)

[USMLE Road Map: Pharmacology](#), 2<sup>nd</sup> ed. (2006), B.G. Katzung and A.J. Trevor, eds. (An abbreviated review)

### *Recommended Websites*

[Facts and Comparisons Drug Information](#) (available on COM Medical Library website)

[e-Pocrates](#) (available on COM Medical Library website)

# Grading

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## *Assignments*

Questions pertaining to Pharmacology 6402 (~34 - 50 per examination) will be included in three integrated block examinations. Integrated quizzes are formative (i.e., they must be taken as scheduled but do not contribute to the final exam average). The results of the NBME Comprehensive Basic Science exam may also be considered in the final grade.

Professionalism will be assessed by standardized patients (SPs) in small group activities. Professionalism concerns may generate a [Report of Concern for Unprofessional Behavior](#).

## *Grading System*

FSU COM has adopted a pass/fail grading system which is used in the curriculum for the first and second years (See Student Handbook). To achieve a grade of Pass in BMS 6402 (Pharmacology) a student must meet all of the following requirements:

- 1) A final average  $\geq 70\%$  on the combination of all examination questions. An average  $<70\%$  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 course is required to:
  - a. Attend the exam review
  - b. Contact the course director within 24 hours of that exam review
  - 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) Satisfactory performance on the NBME Comprehensive Basic Sciences exam, as determined by the course director.
- 4) Attendance and satisfactory participation in all required sessions, as determined by the Course Director. Unexcused absence from an activity for which attendance is required (for example, Small Group session) may be considered as an issue of Professionalism and may result in completion of a [Report of Concern for Unprofessional Behavior](#), a failing grade for the course, and/or referral of the student to the Student Evaluation and Promotions Committee.
- 5) Satisfactory completion of all assignments, as determined by the Course Director.
- 6) Demonstration of the attitudes and behaviors of Medical Professionalism in all aspects of the course. Professionalism concerns may generate a [Report of Concern for Unprofessional Behavior](#).