

COURSE OUTLINE

Revised Spring 2008

Course Number: NUR 151 Course Title: Pharmacology in Nursing

Credits: 3 **Hours:** 3 lecture hours/week x 15 weeks

Catalog description:

This course presents pharmacology as an integrated aspect of nursing practice. Emphasis is placed on information necessary for safe administration of medications, current drug therapies for common medical conditions, and current information necessary to ensure safe nursing practice in the area of pharmacologic interventions.

Prerequisites: NUR 112 or instructor permission **Corequisites:** None

Required texts/other materials:

Lilley, L. L., Harrington, S., and Synder, J.S. (2007), *Pharmacology and the Nursing Process*. (5th ed.) St. Louis, MO: Elsevier Mosby. (purchase both textbook and accompanying study guide)

Last revised: December 2007

Course faculty: Karen Ruffin, RN, MSN, Ed. – Coordinator

Donna Penn, RN, MSN Barbara Kunkel, RN, MSN

Information resources: Textbook, library sources

Course goals:

At the end of this course the student will be able to:

- Describe the nurse's role in the safe administration of pharmacologic agents.
- Identify common drug classifications used in the therapeutic management of common conditions affecting body systems.
- Recognize the potential for adverse interactions among medications, foods, herbal and diet supplement therapies.

Units of Study in Detail

NUR 151 COURSE SCHEDULE

WK	OBJECTIVE(S)	TOPIC	RECOMMENDED READING(S)
1	 Discuss the function and purposes of the nursing process as related to drug therapy. Demonstrate understanding of the role of pharmacokinetics and pharmacodynamics in medications administration. Discuss the influence of age on the effects of medications for a client. Define the ethical aspects of drug administration and the nurse's role. Identify the importance of client education in the administration of medications. Review correct techniques for medication administration. 	Foundations of Pharmacology The Nurse's Role in Medication Administration	Lilley – Chapters 1-6 & 9 Study Guide – Chapters 1-6 & 9
2	 Review the sympathetic nervous system as related to drug therapy with adrenergic agents. Discuss the nurse's role in assessment of the effects of adrenergic agonists, adrenergic antagonists, cholinergic agents, and anti-cholinergic agents. Discuss the difference between an opioid agonist, agonist-antagonist, and antagonist. Describe how the nursing process is applied to clients receiving sedative-hypnotic agents. 	Autonomic and Central Nervous System Drugs	Lilley – Chapters 16-20 Study Guide – Chapters 16-20
3	 Describe the role of the nurse in promoting client compliance with drug therapy for seizure activity. Identify the different classes of medications used in the treatment of Parkinson's disease. Identify the variety of conditions and disorders being treated with CNS stimulants. 		Lilley – Chapters 10-14 Study Guide – Chapters 10-14

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4	 Identify the various drugs in the following classes of psychotherapeutic agents: antianxiety agents, antidepressants, antimanic agents, and antipsychotics. 	Exam #1 Psychotherapeutic Drugs	Lilley – Chapter 15 Study Guide – Chapter 15
5	 Identify significant drugs, laboratory tests, and food interactions associated with positive inotropic agents. Identify the various classes of antidysrhythmic agents as determined by their mechanism of action. 	Cardiovascular System Drugs	Lilley – Chapters 24, 25, 27 & 28 Study Guide – Chapters 24, 25, 27 & 28
6	 Describe the nurse's role in assessing therapeutic versus adverse and toxic effects of various antianginal agents. Identify the various drug classes used to treat hypertension. 		Lilley – Chapters 21-23 Study Guide – Chapters 21-23
7	 Discuss indications for the use of diuretic therapy. Identify the indications for and contraindications to the use of coagulation modifiers. Identify the various antilipemic agents commonly used to treat hyperlipidemia. 		
8	 Discuss the mechanisms of actions and indications for the use of antihistamines, decongestants, antitussives, and expectorants. Identify classes and specific agents used in the treatment of lower respiratory tract disease. 	Respiratory System Drugs	Lilley – Chapters 35-36 & 40 Study Guide – Chapters 35-36 & 40
9	 Identify the various agents used to treat gastric disorders. Differentiate antidiarrheal, laxative and cathartic drugs. Discuss the drug classes identified as antiemetics. 	Exam #2 Digestive System Drugs	Lilley – Chapters 51-53 & 55 Study Guide – Chapters – 51-53 & 55

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10	 Identify the various agents used to treat pituitary disorders. Identify the client teaching needs for a client on thyroid or antithyroid agents. Identify the various agents used to manage Type 1 and Type 2 diabetes mellitus. 	Endocrine System Drugs	Lilley – Chapters 29-30 & 32-34 Study Guide – Chapters 29-30 & 32-34
11	 Discuss the teaching needs of clients receiving adrenal medications. Discuss the expected therapeutic responses to the various women's health agents. Identify the various male reproductive agents and their indications. 		Lilley – Chapter 31 Study Guide – Chapter 31
12	 Classify the various antibiotics with examples of specific drugs in each classification grouping. Describe the process of immunosuppression in clients with viral infections. Identify the various first-line and second-line agents used for the treatment of tuberculosis. Discuss the teaching needs of clients receiving antifungal medications. Discuss the indications for use of antimalarial, antiprotozoal, and antihelminthic agents. 	Antineoplastic & Antimicrobial Drugs	Lilley – Chapters 37-39 & 41-48 Study Guide – Chapters 37-39 & 41-48
13	 Differentiate between disinfectants and antiseptics. Describe how nonsteroidal anti-inflammatory drugs and other anti-inflammatory agents exert their mechanisms of action. Discuss the role of immunosuppressive therapy in the treatment of autoimmune diseases. Identify diseases that are treated with toxoids and vaccines. Discuss the purpose of antineoplastic and biologic response modifiers in the treatment of neoplasms. 		

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14	 Discuss the various conditions when blood-forming agents might be indicated. Identify various dermatologic agents and their indications for use. Classify the various ophthalmic and otic agents. Identify the various fluid and electrolyte solutions commonly used in the management of fluid and electrolyte imbalances. 	Exam #3 Specialty Drugs and IV Therapy	Lilley – Chapters 26 & 56-59 Study Guide – Chapters 26 & 56-59
15	 Discuss the treatment of various vitamin or mineral imbalances. Compare the various enteral and parenteral nutritional supplements. 	Food, Herbal and Supplement Interactions	Lilley – Chapters 7 & 54 Study Guide – Chapters 7 & 54
*		FINAL EXAM	

Evaluation of Student Learning:

Course Requirements:

- 1. Unit Exams 3
- 2. Final Exam

Grading

OMB 210

Unit Exams	60%
Final Exam	30%
Workbook	10%
Pharmacology ATI	1 noint ex

Pharmacology ATI1 point extra credit

Academic Integrity Statement: ACADEMIC INTEGRITY

GRADING

A	97-100
A-	93-96
B +	89-92
В	85-88
B-	81-84
C+	78-80
C	75-77
D	61-74
F	60 or below

Mercer County Community College is committed to Academic Integrity -- the honest, fair and continuing pursuit of knowledge, free from fraud or deception. This implies that students are expected to be responsible for their own work, and that faculty and academic support services staff members will take reasonable precautions to prevent the opportunity for academic dishonesty.

The college recognizes the following general categories of violations of Academic Integrity, with representative examples of each. Academic Integrity is violated whenever a student:

A. Uses or obtains unauthorized assistance in any academic work.

- copying from another student's exam.
- using notes, books, electronic devices or other aids of any kind during an exam when prohibited.
- stealing an exam or possessing a stolen copy of an exam.

B. Gives fraudulent assistance to another student.

- completing a graded academic activity or taking an exam for someone else.
- giving answers to or sharing answers with another student before, during or after an exam or other graded academic activity.
- sharing answers during an exam by using a system of signals.

C. Knowingly represents the work of others as his/her own, or represents previously completed academic work as current.

- submitting a paper or other academic work for credit which includes words, ideas, data or creative work of others without acknowledging the source.
- using another author's words without enclosing them in quotation marks, without paraphrasing them or without citing the source appropriately.
- presenting another individual's work as one's own.
- submitting the same paper or academic assignment to another class without the permission of the instructor.

D. Fabricates data in support of an academic assignment.

- falsifying bibliographic entries.
- submitting any academic assignment which contains falsified or fabricated data or results.

E. Inappropriately or unethically uses technological means to gain academic advantage.

- inappropriately or unethically acquiring material via the Internet or by any other means.
- using any electronic or hidden devices for communication during an exam.

Each instructor and academic support service area is authorized to establish specific guidelines consistent with this policy.

CONSEQUENCES FOR VIOLATIONS OF ACADEMIC INTEGRITY

For a single violation, the faculty member will determine the course of action to be followed. This may include assigning a lower grade on the assignment, assigning a lower final course grade, failing the student in the course, or other penalty appropriate to the violation.

In all cases, the instructor shall notify the Chair of the Academic Integrity Committee of the violation and the penalty imposed.

When two (or more) violations of academic integrity are reported on a student, the Academic Integrity Committee (AIC) may impose disciplinary penalties beyond those imposed by the course instructors. The student shall have the right to a hearing before the AIC or a designated AIC subcommittee.

APPEALS

The student has a right to appeal the decision of the instructor or the Academic Integrity Committee. Judicial procedures governing violations of Academic Integrity are contained in the Student Handbook.

Approved by the MCCC Board of Trustees March 18, 2004