UNIVERSITY OF FLORIDA

COLLEGE OF NURSING

COURSE SYLLABUS

SPRING 2015

COURSE NUMBER NGR 6172

COURSE TITLE Pharmacotherapeutics for Advanced Practice Nursing

CREDITS 4

PLACEMENT Variable

PREREQUISITES NGR 6002C, NGR 6140

COREQUISITES None

# FACULTY Kim Curry, PhD, ARNP, Clinical Associate Professor

COURSE DESCRIPTION This course provides the knowledge and skills to assess, diagnose, and pharmacologically manage a client’s common health problems in a safe, high quality, cost-effective manner. Emphasis is on the development of therapeutic decision-making in drug selection for the client based on health problems, individual variations, and economic considerations. The focus is on prescriptive practices, client education, and monitoring of the therapeutic response to pharmacologic agents in diverse clients across the lifespan.

This is a challenging and time consuming course with a strong clinical focus. You will need to devote several hours per week to studying in addition to reviewing all course materials and listening to the lectures. Please plan carefully to ensure that you can complete the course successfully.

COURSE OBJECTIVES Upon completion of this course, the student will be able to:

1. Apply the principles of pharmacokinetics and pharmacodynamics in selecting medication therapy.

2. Analyze the relationship between pharmacologic agents and physiologic/pathologic responses.

3. Compare and contrast pharmacological agents with respect to treatment of individuals with specific acute and chronic health problems across the lifespan.

4. Select pharmacologic agents for the management of client health problems based on client variations, the problem being managed and cost effectiveness.

5. Identify actual and potential adverse drug reactions and significant drug interactions.

6. Develop relevant client education strategies to facilitate client collaboration in treatment and to maximize therapeutic response.

7. Evaluate the effects of single and multiple drug regimens on client health status and functioning.

1. Evaluate the interactions of nonprescription therapies with prescription therapies.

COURSE SCHEDULE

E-Learning in Canvas is the course management system that you will use for this course. E-Learning in Canvas is accessed by using your Gatorlink account name and password at <https://lss.at.ufl.edu/>. There are several tutorials and student help links on the E-Learning login site. If you have technical questions call the UF Computer Help Desk at 352-392-HELP or send email to [helpdesk@ufl.edu](mailto:helpdesk@ufl.edu).

It is important that you regularly check your Gatorlink account email for College and University wide information and the course E-Learning site for announcements and notifications.

Course websites are generally made available on the Friday before the first day of classes.

TOPICAL OUTLINE

1. Clinical pharmacokinetics and individualization of drug therapy including absorption, distribution, metabolism and excretion for various client populations
2. Principles of half-life, effective concentration, peak plasma levels, therapeutic blood levels, and minimal and maximum effective levels
3. Pharmacodynamics including alterations of cell environment and functions and drug receptor activity
4. Pharmacotherapeutic decision-making for common acute and chronic health problems across the lifespan including drug selection, intervention, and monitoring for
5. Immunological Alterations
6. Tissue Defense Alterations
7. Endocrine Alterations
8. Neurological Alterations
9. Hematological Alterations
10. Dermatological Alterations
11. Cardiovascular Alterations
12. Respiratory Alterations
13. Gastrointestinal Alterations
14. Musculoskeletal Alterations
15. Genitourinary Alterations
16. Affective and Cognitive Alterations

5. Therapeutic response to pharmacological agents

6. Adverse drug reactions and appropriate interventions

7. Drug interactions based on selected drug categories including drug-drug interactions, drug-food interactions, drug-ethanol/tobacco interactions and drug-environmental interactions

8. Prescriptive practice and dispensing limitations for advanced practice nurses including writing prescriptions, legal authority and restrictions, ethics, and clinical standards

9. Alternative therapies

10. Client education and adherence

11. Economic implications of drug selection and management on client’s lifestyle

12. Implications of client's cultural health beliefs and practices on drug selection and monitoring

13. Resource utilization

TEACHING METHODS

On line lectures, audiovisual materials, written materials, case studies, selected readings, and electronic sources.

LEARNING ACTIVITIES

Readings, case study analysis, and study questions.

EVALUATION METHODS/COURSE GRADE CALCULATION

Examinations and written assignments. All assignments and exams are submitted electronically. No hard copy submissions are accepted.

MAKE UP POLICY

There will be no make-up exams scheduled for missed exams. If a student must miss an exam, the instructor must be contacted and may elect to average the remaining exam scores and record this as the score for the missed exam. Subsequent to the first missed exam, any further missed examination/s will be scored as zero (0). Students may not elect to skip any exams.

GRADING SCALE/QUALITY POINTS

A 95-100 (4.0) C 74-79\* (2.0)

A- 93-94 (3.67) C- 72-73 (1.67)

B+ 91- 92 (3.33) D+ 70-71 (1.33)

B 84-90 (3.0) D 64-69 (1.0)

B- 82-83 (2.67) D- 62-63 (0.67)

C+ 80-81 (2.33) E 61 or below (0.0)

\* 74 is the minimal passing grade

For more information on grades and grading policies, please refer to University’s grading policies: <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

REQUIRED TEXTBOOKS

1. Edmunds M, and Mayhew M (2013). *Pharmacology for the Primary Care Provider*, 4th ed. ISBN 9780323087902. St. Louis, MO: Elsevier. Be sure to purchase the second printing of the 4th edition as it contains corrections to the text. Look on the copyright page at the bottom for a statement “Last digit is the print number” and be sure that the last digit is a “2” and not a “1”.

2. Required electronic source: Clinical Pharmacology online, accessed via the Health Science Center Website.

3. Reading assignments also consist of web links and other supplemental materials. These are available on the course web site for each week. Be sure to study these materials in addition to your text and pharmacology database.

RECOMMENDED TEXTBOOK

The student’s current advanced health assessment text and pathophysiology text may be referenced if needed.

WEEKLY CLASS SCHEDULE

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| **Date** | **Topic** | **Readings** |
| Week 1  January 8th | Introduction to pharmacology & Prescription writing  Pharmacokinetics & Pharmacodynamics  Special Populations | Units 1 and 2: all  Unit 3: Chapter 10 |
| Week 2  January 15th  **Case #1 due: prescription writing** | Respiratory Agents | Unit 5: all |
| Week 3  January 22rd | Antibiotics | Unit 14: all |
| Week 4  January 29th  **Live exam review 7 pm** | Dermatology/topical agents | Unit 4: all |
| Week 5  February 5th | **Exam #1 Week 2-4** | **Exam available from 8am-10pm** |
| Week 6  February 12th  **Case #2 due: Dyslipidemia** | Lipid medications  Dysrhthmias  Anticoagulants | Unit 6: Chapters 23, 24, 25 |
| Week 7  February 19th  **Live exam review 7 pm** | Cardiovascular/Diuretics/CHF | Unit 6: Chapters 17-22  Unit 8: Chapter 32 |
| Week 8  February 26th | **Exam #2 Weeks 6-7** | **Exam available from 8am to 10pm** |
| Week 9  March 5th | Spring Break, no class |  |
| Week 10  March 12th  **Case #3 due: Endocrine** | Endocrine  Gastrointestinal | Unit 12: all  Unit 7: all |
| Week 11  March 19th | Contraception and HRT  Osteoporosis | Unit 13: chapter 54 and 55  Unit 9: chapter 39 |
| Week 12  March 26th  **Live exam review at 7 pm** | Mental Health/  ADD/Insomnia | Unit 11: all  Unit 10: chapter 41 |
| Week 13  April 2rd | **Exam #3 Week 9-11** | **Available 8 am – 10 pm** |
| Week 14  April 9th  **Case #4 due: Osteoarthritis** | Musculoskeletal/gout  Pain management | Unit 9: Chapters 35-38, 40  Unit 10: Chapter 43 |
| Week 15  April 16th | Anticonvulsants,  Antiparkinson agents, Dementia, Migraines | Unit 10: Chapters 42, 44, 45, 46 |
| Week 16  April 23th  **Live exam review at 7 pm** | Genitourinary  Health Promotion | Unit 8: Chapters 33, 34  Unit 15: all |
| Week 17  April 30th | **Exam #4 Weeks 13-15** | **Available Monday April 28th from 8am-10pm.** |

University and College of Nursing Policies:

Please see the College of Nursing website for a full explanation of each of the following policies - <http://nursing.ufl.edu/students/student-policies-and-handbooks/course-policies/>.

Attendance

Academic Honesty

UF Grading Policy

Accommodations due to Disability

Religious Holidays

Counseling and Mental Health Services

Student Handbook

Faculty Evaluations

Student Use of Social Media