UNIVERSITY OF FLORIDA

COLLEGE OF NURSING

COURSE SYLLABUS

SPRING 2017

COURSE NUMBER NGR 6172 – Section 1H95

COURSE TITLE Pharmacotherapeutics for Advanced Nursing Practice

CREDITS 4

PLACEMENT Variable

# PREREQUISITES NGR 6140 Physiology and Pathophysiology for

# Advanced Nursing Practice

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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.

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

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

This is a completely asynchronous course. There is no required class attendance. The course is offered in an online format. **All assignments are due and tests are administered on Thursdays.** Any change in these dates will be announced in advance. If you desire additional face to face time with the instructor, this can be arranged by emailing the professor.

No due dates will be altered to accommodate your other course, work, or family obligations. If, upon review of this syllabus, you feel it would be too challenging to meet the schedule requirements of this course, you should consider taking this course in a subsequent semester when your schedule allows it. Your continued enrollment in this course connotes agreement with the schedule.

E-Learning in Canvas is the course management system that is used for this course. E-Learning in Canvas is accessed by using your Gatorlink account name and password at <https://elearning.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). Course websites are generally made available on the Friday before the first day of classes.

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.

The College of Nursing will utilize ProctorU, a live proctoring service, for major examinations in graduate web-based online courses to ensure a secure testing environment. Students must sign in to ProctorU prior to the scheduled time for each exam in order to authenticate their identity and connect with the live proctor. Students authenticate their identity and are remotely monitored by a trained employee of ProctorU.

ProctorU:

• Each student computer must be in compliance with Policy S1.04, Student Computer Policy and must contain a web cam, microphone, and speakers.

• Students go to the website http://www.proctoru.com/ and click on “How To Get Started”. This will permit students to create an account and test out their system.

• Once an instructor makes an exam available, students go online to ProctorU to schedule the exam session. Students must provide a valid email address and phone number where they can be reached during an exam.

• CON IT Support office will oversee this process and provide technical assistance.

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, study questions, group work.

EVALUATION METHODS/COURSE GRADE CALCULATION

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

GRADING PLAN:

Examinations (4 at 15% each) 60%

Case studies (4 at 10% each) 40%

Exams: Each exam is 60 questions, and has a 90-minute time limit. The exams are available in Proctor U from 8:00 am – 10:00 pm. Exams will be graded and results posted within 72 hours.

Case Studies: Case studies must be done in groups of two students. No individual case studies will be accepted, only group work. Case studies will have 5% per day deducted for late submissions. Case studies will be graded and results posted within 7 days.

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 at their discretion 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: http://gradcatalog.ufl.edu/content.php?catoid=4&navoid=907#grades

PROFESSIONAL BEHAVIOR

The College of Nursing expects all Nursing students to be professional in their interactions with patients, colleagues, faculty, and staff and to exhibit caring and compassionate attitudes. These and other qualities will be evaluated during patient contacts and in other relevant settings by both faculty and peers. Behavior of a Nursing student reflects on the student's individual’s ability to become a competent professional Nurse. Attitudes or behaviors inconsistent with compassionate care; refusal by, or inability of, the student to participate constructively in learning or patient care; derogatory attitudes or inappropriate behaviors directed at patients, peers, faculty or staff; misuse of written or electronic patient records (e.g., accession of patient information without valid reason); substance abuse; failure to disclose pertinent information on a criminal background check; or other unprofessional conduct can be grounds for disciplinary measures including dismissal.

UNIVERSITY POLICY ON ACADEMIC MISCONDUCT

Academic honesty and integrity are fundamental values of the University community. Students should be sure that they understand the UF Student Honor Code at <http://www.dso.ufl.edu/students.php>. Students are required to provide their own privacy screen for all examination’s administered to student laptops. No wireless keyboards or wireless mouse/tracking device will be permitted during examinations.

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

UF Grading Policy

Accommodations due to Disability

Religious Holidays

Counseling and Mental Health Services

Student Handbook

Faculty Evaluations

Student Use of Social Media

REQUIRED TEXTBOOKS

1. Edmunds M, and Mayhew M (2013). *Pharmacology for the Primary Care Provider*, 4th edition, 2nd or 3rd printing. ISBN 9780323087902. St. Louis, MO: Elsevier.
   1. **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” or a “3”.**

2. Required electronic source: Clinical Pharmacology online, accessed via the Health Science Center Website: <http://www.clinicalpharmacology-ip.com/default.aspx>

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.

Handheld pharmacology software is HIGHLY recommended as you will use this throughout your career. Epocrates, Lexi-Drugs, and the Clinical Pharmacology mobile app are examples. Choose the software you prefer and practice using it as you answer questions and look up medications throughout this course.

WEEKLY CLASS SCHEDULE

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| --- | --- | --- |
| **Date** | **Topic** | **Readings** |
| **Week 1**  January 4th | Introduction to Pharmacology & Prescription Writing  Pharmacokinetics & Pharmacodynamics  Special Populations | Unit 1: All  Unit 2: All  Unit 3: Chapter 10 |
| **Week 2**  January 9th  **Case #1 due: prescription writing** | Respiratory Agents | Unit 5: All |
| **Week 3**  January 17th | Antibiotics | Unit 14: All |
| **Week 4**  January 23rd | Dermatology/Topical Agents | Unit 4: All |
| **Week 5**  January 30th | **Exam #1 Week 1-4** | **Available February 2nd from 8am-10pm** |
| **Week 6**  February 6th  **Case #2 due: Dyslipidemia** | Dyslipidemics  Dysrhythmias  Anticoagulants | Unit 6: Chapters 23, 24, 25 |
| **Week 7**  February 13th | Cardiovascular/Diuretics/CHF | Unit 6: Chapters 17-22  Unit 8: Chapter 32 |
| **Week 8**  February 20th | **Exam #2 Weeks 6-7** | **Available February 23rd**  **from 8am to 10pm** |
| **Week 9**  February 27th  **Case #3 due: Endocrine** | Endocrine  Gastrointestinal | Unit 12: All  Unit 7: All |
| **Week 10**  March 6th – March 10th | **Spring Break: No Class** | |
| **Week 11**  March 13th | Contraception and HRT  Osteoporosis | Unit 13: Chapters 54, 55  Unit 9: Chapter 39 |
| **Week 12**  March 20th | Mental Health/  ADD/Insomnia | Unit 11: All  Unit 10: Chapter 41 |
| **Week 13**  March 27th | **Exam #3 Weeks 9-12** | **Available March 30th**  **8 am – 10 pm** |
| **Week 14**  April 3rd  **Case #4 due: Osteoarthritis** | Musculoskeletal/Gout  Pain Management | Unit 9: Chapters 35-38, 40  Unit 10: Chapter 43 |
| **Week 15**  April 10th | Anticonvulsants,  Antiparkinsonian Agents, Dementia, Migraines | Unit 10: Chapters 42, 44, 45, 46 |
| **Week 16**  April 17th | Genitourinary  Health Promotion | Unit 8: Chapters 33, 34  Unit 15: All |
| **Week 17**  April 24th | **Exam #4 Weeks 14-16** | **Available April 27th**  **8 am – 10 pm** |