

**Western Kentucky University  
Department of Nursing  
Spring, 2021**

**Advanced Pharmacology  
N515**

**Melinda C. Joyce, Pharm.D., FAPhA, FACHE**

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Department of Nursing  
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**Nursing 515:** Advanced Pharmacology

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**Course Description:**

Pharmacologic applications for primary care practice is a course designed to prepare nurse practitioners for prescribing medications within their scope of practice. Basic pharmacologic principles and the pharmacologic actions of major drug classes will be discussed in relation to physiologic systems with emphasis on the application of these agents to primary care practice.

**Text:**

**Required:** None

Although no text is required, I would recommend investing in a good pharmacology app for your mobile device/ SmartPhone. There are several good ones available, some are free while others have a subscription associated with them. You will use this not only for class, but for your clinical activities.

**Objectives of the course:**

The student will:

1. comprehend the pharmacotherapeutics of broad categories of drugs;
2. analyze the relationship between pharmacologic agents and physiologic/ pathologic responses;
3. understand the pharmacokinetics and pharmacodynamics of broad categories of drugs;
4. understand the motivations of clients in seeking prescriptions and the willingness to adhere to prescribed regimens;
5. safely and appropriately select pharmacologic agents for the management of client health problems based on client variations, the problem being managed, and cost-effectiveness;
6. provide comprehensive and appropriate client education in relation to prescribed pharmacologic agents;
7. analyze the effects of single and multiple drug regimens on the client's health and functioning;
8. understand the variety of state legal requirements for advanced practice nursing prescriptive authority; and
9. fulfill legal requirements for writing prescriptions as an advanced practice nurse in the appropriate state.

<b>Course Objectives</b>	<b>MSN Program Outcomes</b>	<b>DNP Program Outcomes</b>
The student will: comprehend the pharmacotherapeutics of broad categories of drugs	<p>Assume and develop practice and professional roles to meet societal needs to promote high quality, safe, patient care.</p> <p>Integrate theory and research from nursing and related disciplines as a foundation for advanced practice.</p> <p>Integrate theoretical knowledge of health promotion and maintenance and illness/disease prevention to achieve optimal health.</p>	Critically appraise theoretical concepts and knowledge from nursing and other disciplines and integrate this evidence in developing, implementing, and evaluating best practices for improved health outcomes.
analyze the relationship between pharmacologic agents and physiologic/pathologic responses;	<p>Integrate theory and research from nursing and related disciplines as a foundation for advanced practice.</p> <p>Integrate theoretical knowledge of health promotion and maintenance and illness/disease prevention to achieve optimal health</p>	Critically appraise theoretical concepts and knowledge from nursing and other disciplines and integrate this evidence in developing, implementing, and evaluating best practices for improved health outcomes.
understand the pharmacokinetics and pharmacodynamics of broad categories of drugs	Integrate theory and research from nursing and related disciplines as a foundation for advanced practice. Integrate theoretical knowledge of health promotion and maintenance and illness/disease prevention to achieve optimal health	Critically appraise theoretical concepts and knowledge from nursing and other disciplines and integrate this evidence in developing, implementing, and evaluating best practices for improved health outcomes.
understand the motivations of clients in seeking prescriptions and the willingness to adhere to prescribed regimens;	Assume and develop practice and professional roles to meet societal needs to promote high quality, safe, patient care.	Develop, integrate, and evaluate evidence-based health care innovations while considering cultural, economic, ethical, legal, political, and technological issues across diverse health systems and models.
safely and appropriately select pharmacologic agents for the management of client health problems based on client variations, the problem being managed, and cost-effectiveness;	Assume and develop practice and professional roles to meet societal needs to promote high quality, safe, patient care.	<p>Demonstrate interprofessional collaboration and leadership skills to improve patient and population health outcomes.</p> <p>Apply the relevant advanced practice role to improve patient health outcomes and health care systems.</p>
provide comprehensive and appropriate client education in relation to prescribed pharmacologic agents;	Assume and develop practice and professional roles to meet societal needs to promote high quality, safe, patient care.	Develop, integrate, and evaluate evidence-based health care innovations while considering cultural, economic, ethical, legal, political, and technological issues across diverse health systems and models.

analyze the effects of single and multiple drug regimens on the client's health and functioning	Assume and develop practice and professional roles to meet societal needs to promote high quality, safe, patient care.	Critically appraise theoretical concepts and knowledge from nursing and other disciplines and integrate this evidence in developing, implementing, and evaluating best practices for improved health outcomes.
understand the variety of state legal requirements for advanced practice nursing prescriptive authority	Assume and develop practice and professional roles to meet societal needs to promote high quality, safe, patient care.	Apply the relevant advanced practice role to improve patient health outcomes and health care systems.
fulfill legal requirements for writing prescriptions as an advanced practice nurse in the appropriate state.	Assume and develop practice and professional roles to meet societal needs to promote high quality, safe, patient care.	Apply the relevant advanced practice role to improve patient health outcomes and health care systems.

### Teaching Methods:

Recorded presentations (Mediasite videos), reading assignments, homework assignments and examinations

The class does not meet in person. All lectures will be available through Blackboard.

### Examinations:

Four (4) closed-book examinations will be administered during the semester. These exams will be worth 50 points each and will concentrate on the material presented during lectures prior to the scheduled exam. The exams may contain all types of questions, e.g., multiple choice, true-false, matching, discussion, etc. The exams will be administered through Blackboard.

The final examination will be worth 100 points and will be comprehensive. The final may contain all types of questions, although many will be short answer. You will be able to use your class notes for the final. The exam will be administered through Blackboard.

There will be homework assignments during the semester that will be worth a total of 90 points.

Homework:	90 points
Exam 1:	50 points
Exam 2:	50 points
Exam 3:	50 points
Exam 4:	50 points
Final:	100 points

**Total: 390 points**

**Grading:**

Grading will be based on a potential of 390 points and the grades are determined by the actual point total.

A:	351-390
B:	315-350
C:	283-314
D:	255-282
F:	Less than 254

Faculty reserve the right to make changes in the course syllabus including the specified methods for deriving the final grade as the situation may require. Students will be notified in writing when such changes are required.

Blackboard will be utilized to distribute handouts, supplemental reading, homework assignments, and exams. Students will be expected to submit all assignments through Blackboard. The exams will also be administered through Blackboard.

All assignments must be submitted to Blackboard on their due date, unless prior arrangements with the instructor are made. All written documents must be in Word doc, docx, or rtf format. Please do not submit in a pdf format.

**Course Schedule**

Please see the course schedule for specifics of each class. For all topics, there will either be Mediasite videos and handouts or just a handout. All will be posted on Blackboard.