APPLIED PHARMACOLOGY FOR PRIMARY CARE
NUR 809
Section 731, 732, 733
On-Line
Spring 2010

Catalog Course Description:  Clinical application of advanced pharmacology and pharmacotherapeutics for common disease conditions encountered in primary care settings. Principles of altered pharmacodynamics relative to age, race, and ethnic groups. Cost/benefit aspects of pharmacological interventions.

Course Objectives: At the end of this course, students will:
1. Apply the principles of pharmacology relative to pharmacotherapeutics across age levels including the effect of race, ethnic group, and special populations on drug dosing and drug selection regimens.
2. Discuss the indications, rationale, efficacy, and risks for pharmacotherapeutic agents commonly prescribed in primary care settings.
3. Analyze the rationale for selection of medications used to treat individuals with frequently encountered primary care conditions based on factors such as pharmacokinetics, cost, efficacy, genetic characteristics, adherence, and quality of life issues.
4. Describe strategies for monitoring expected effects and potential adverse effects of medications including legal and ethical ramifications

Prerequisites: NUR 805

Co-requisites: None

Professional Standards & Guidelines: The curriculum is guided by the following documents:


Faculty: Patty Peck MS, PNP-BC
Associate Professor
ppeek@msu.edu

Note: Office hours can be arranged to accommodate student schedules.
Instruction:

a. Required Texts:


Lehne, Richard (2009) *Pharmacology for Nursing Care* (7th ed.). WB Saunders (you are not required to purchase the study guide)

AND

The Prescriber’s Letter: a monthly update of pharmacology news as well as a password protected electronic resource for extensive pharmacology information. You will have weekly required readings from the website. “Each student is expected to subscribe to this publication. There are multiple readings from this including readings for week 1. You will need to subscribe by going to [http://www.prescribersletter.com](http://www.prescribersletter.com) and request a student rate.

Electronic references will be used throughout the course to supplement text readings and course content.

Textbooks may be purchased online at: [http://www.spartanbook.com/](http://www.spartanbook.com/) Enter the semester, year, course number and section number for a list of textbooks for your course.

Evaluation:

a. Learning Assessments and Grading:

Grades will be determined by adding all of the course activities together and arriving at a specific number (point total). The MSU 4.0 grading system will be utilized to report final course grades.

Points will be rounded to whole numbers using the 0.5 rules. Points at $\geq 0.5$ will be rounded up while those $< 0.5$ will be rounded down to the nearest whole number.

There is no opportunity for “extra credit” in this course.

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<tr>
<th>%</th>
<th>GRADE</th>
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<tbody>
<tr>
<td>100 - 94</td>
<td>4.0</td>
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<td>93-87</td>
<td>3.5</td>
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<td>86-80</td>
<td>3.0</td>
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<td>79-75</td>
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<td>74-70</td>
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<td>64-60</td>
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<td>Below 60</td>
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b. Required Resources, References, Supplies:

ANGEL Help Line  
1.800.500.1544 (24 hrs, 7 days/week)  
517.355.2345 (24 hrs, 7 days/week)  
[www.angel.msu.edu](http://www.angel.msu.edu) (ANGEL Help link in upper right corner)  
Always check with the ANGEL Help Line first!
ANGEL Communication Guidelines & Rules of Conduct

Please go to http://angel.msu.edu, login, and click on the Online Teaching/Learning-ANGEL group for examples of netiquette and ANGEL communication guidelines. The course will also provide you with some online discussion guidelines.

Library Resources

1. Library Services: http://www.lib.msu.edu/services/
2. MSU Library: http://www.lib.msu.edu/
3. Proxy server: To access MSU library resources from an off-campus site you must set up a proxy server. Directions to set up a proxy server are at: http://techbase.msu.edu/viewpathfinder.asp?id=2507

Disability Resources and Services

The full range of disability resources and services for students is located at: http://www.msu.edu/current/index.html

*University & College Policies:

The College of Nursing expects that students will demonstrate professional behavior in all situations. Specific expectations for clinical and other professional venues can be found in the appropriate handbook. You are responsible for reviewing and acting in accordance with the policies and procedures found in the following sources, including the following topics: Professionalism, Academic Integrity, Accommodations for Students with Disabilities, Disruptive Behavior, Attendance, Compliance, and Progression.

- CON Student handbook http://nursing.msu.edu/analyzhandbooks.asp
- Information for Current Students—including Rights, Responsibilities and Regulations for Students http://www.msu.edu/current/index.html
- Academic Programs http://www.reg.msu.edu/UCC/AcademicPrograms.asp
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Additional Course Content

Instruction:

c. Methodology:

NUR 809 uses an online format which serves as a web-based classroom. The course has no “real time” requirement so students are able to access the course at times generally convenient to their individual schedules.

The course is designed to facilitate application of pharmacological concepts to primary care case situations. Content is divided into seven units. Discussion of cases is an important component of the course. New content for each week will be posted on the Saturday prior to the class date on the calendar.

As you look at the weekly agenda (found under lessons), you will find the readings, lecture content, cases and discussion areas. It is wise to check in on the class frequently since it is also a place where the instructor will be able to post announcements and other news.

You can access the class by going to http://angel.msu.edu. Once you are enrolled in the course and have activated your MSU email account, you will be able to log on and find the 809 course. You may not access the course until 12:01 am on the official first day of class. Click on the class and you will be taken to the course spot! Make sure to spend some time to orient yourself to the site. Again, check in frequently (at least twice per week). If you would like to have your MSU email forwarded to your preferred email account, you can do this by going to http://mail.msu.edu

In order for the discussion room to work effectively, a few “rules” have been developed:

--try to keep your discussion in the “right room”. In other words, it helps everyone if the discussion fits the conversation. For example, it is best to keep discussion of hypertension management in cardiovascular rather than in the discussion ethics of prescribing.

--if you find you want a new conversation added, please let your instructor know. This is best done via a message in the discussion room.

--check in frequently since we will use it to make announcements about readings, new web sites, changes in schedule etc.

--remember that the discussion is OPEN to many people in the course so your more private conversations with either faculty or other students may be best done via email. If you present real clinical cases, please adhere to HIPAA guidelines and protect the anonymity of your patient. In addition, if you share “family” cases, you should not reveal details that would potentially reveal their identify.

--If you find some new websites or articles that you think others would like to see, please post them. To do this in ANGEL simply type the URL in (including the http://) .

--it is expected that APA format will be used to cite resources used in the discussion.
Evaluation:
   a. Learning Assessments and Grading:

**Technology Requirements**
In order to fully participate in the online course experience, it is important that you have the appropriate technology available. Please go check the current requirements at
http://nursing.msu.edu/downloads/Hardwareandsoftwarereq2006_000.pdf

**Grading**

**Exams**
There are 5 exams throughout the semester. 4 of the exams are UNTIMED. Each exam covers one or two units of content. Exams are posted at 8a on Fridays and MUST be submitted by 23:59p on the following Tuesday. (please see "quiz tips" in the introduction week content for more information on the specifics of taking the exams).
The last exam is timed. You will be allowed ninety minutes to complete the final exam. Once you log onto the exam, you must complete it. **The exam will be open on Saturday May 1 at 12:01am and close on Tuesday May 4 at at 11:59:00 pm.** Times posted are EASTERN time. Please schedule your exam time into your personal calendar NOW. The days for the exam cannot be altered so it is important that you have time set aside sometime during those dates.
Unless there is an unexpected emergency EVERYONE is expected to take the exam during the scheduled days (a family vacation, etc., does not constitute an unexpected emergency). You are highly encouraged to plan far in advance to be free from other work responsibilities for that time.

The five exams count equally and will be worth a total of 75% of your grade.

**Discussion**

Discussion questions are posted each week and it is expected that all students will be active discussants. Discussion is a graded component of the course. Each of the seven units has one discussion area that will be graded. You will find the rubric for grading the discussion in CLASS DOCUMENTS. Postings must be completed by Friday at 11:59p to be counted for the week. Grades for the weekly discussions will be posted within a week following the discussion. The due dates are posted on the class calendar and listed in the weekly activities.

Of course, discussion is highly encouraged for those cases/questions that are not graded! Sharing of expertise, questions and critique is an important part of the process of applying concepts to clinical practice

Each of the seven graded discussions is given a grade of 1-4 points. The seven graded discussions will count for 25% of your grade.

The grading scale used is based on the MSU 4.0 system. Grades will be rounded off to the nearest whole number using the “O.5” rule. Grade percents will be rounded up or down. For example, if the grade is 86.50%, it will be rounded to 87. If it is 89.45%, it will be rounded to 89%.

**End of semester grades and transcripts**

MSU no longer sends grades to individuals. As soon as the final grades are submitted (usually the week following final's week), you will be able to access your grade report by going to the Student info site.  
https://ntweb1.ais.msu.edu/StuInfo/

If you require a transcript of the grade sent to another University, you may also do that online by going to http://www.reg.msu.edu/StuForms/TranscriptRequest/Transcript.asp . Again, this can only be done after the final grades have been submitted to the registrar and grades recorded by the University (generally completed on the Wednesday following final’s week).
Course Policies:

**Academic Integrity**

Please read each part of the following site to fully understand your responsibilities and the position of the University regarding:

- cheating,
- plagiarism,
- MSU regulations, ordinances and policies regarding academic honesty and integrity
- Academic Integrity links
  
  http://www.msu.edu/unit/ombud/honestylinks.html

Academic dishonesty in any form will not be tolerated in the College of Nursing. Any student involved in academic dishonesty will be reported to the Office of Academic Affairs and the Office of Student Affairs in the College of Nursing and a grade of 0.0 may be issued for the course.

Lectures, quizzes and examinations must remain the property of the College of Nursing and must not be copied from the internet. According to university policy, consequences for academic dishonesty may include failure of the course, expulsion from the major, or expulsion from the university.

Online discussions and exercises are confidential and should not be discussed with others who are not enrolled in the class. It is important for each course participant to express his/her ideas. All ideas need to be respected in discussions and exercises. Any “group projects” that are required, still require individual work as a minimal expectation.

For further information you can access any of the following sites:

- MSU Spartan Life Student Handbook and Resource Guide
  
  http://www.vps.msu.edu/SpLife/index.htm
- Information for Current Students – including Rights, Responsibilities and Regulations for Graduate Students
  
  http://www.msu.edu/current/index.html
- International Studies and Programs
  
  http://www.msu.edu/international/index.html

**Calendar**

The calendar for assignments and content is available within the course. Classes begin the week of May 18 and end the week of August 17. You will be able to access the course at http://angel.msu.edu anytime from 12:01a on May 18.

Prior to the start of the course, the faculty will email you with the required reading list for week one so that you may prepare for the introductory week content.

The MSU academic calendar with important dates is located at:

http://www.reg.msu.edu/ROInfo/Calendar/Academic.asp
<table>
<thead>
<tr>
<th>Week</th>
<th>Unit</th>
<th>Topics</th>
<th>Assessments</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1: Jan 10-17</td>
<td>I: Principles</td>
<td>Pharmacokinetics, pharmacodynamics, pharmacogenomics</td>
<td>Graded discussion Posts due 1/29 (11:55p)</td>
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<td>#2 Jan 18-24</td>
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<td><strong>Unit I exam</strong></td>
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<td></td>
<td>Open: 1/29 (12:01a)</td>
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<tr>
<td>#3 Jan 25-31</td>
<td>II: Cardio-</td>
<td>Hypertension</td>
<td><strong>Graded case discussion</strong></td>
</tr>
<tr>
<td>#4 Feb 1-7</td>
<td>Respiratory</td>
<td>Hyperlipidemia, heart failure</td>
<td>due 2/19 (11:55p)</td>
</tr>
<tr>
<td>#5 Feb 8-14</td>
<td></td>
<td>Asthma, COPD</td>
<td><strong>Unit II Exam</strong></td>
</tr>
<tr>
<td>#6 Feb 15-21</td>
<td>III: Antimicrobials</td>
<td>Antimicrobial resistance</td>
<td><strong>Graded case discussion</strong></td>
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<tr>
<td>#7 Feb 22-28</td>
<td></td>
<td>Upper respiratory infections, community acquired pneumonia</td>
<td>due 3/5 (11:55p)</td>
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<tr>
<td>#8 Mar 1-7</td>
<td>IV: Diabetes</td>
<td>Type 1 DM, Type 2 DM</td>
<td><strong>Graded case discussion</strong></td>
</tr>
<tr>
<td>#9 Mar 8-14</td>
<td>SPRING BREAK</td>
<td>NO CLASSES</td>
<td>due 3/26 (11:55p)</td>
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<tr>
<td>#10 Mar 15-21</td>
<td>V: GI</td>
<td>PUD, GERD</td>
<td><strong>Units IV/V Exam</strong></td>
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<tr>
<td>#11 Mar 22-28</td>
<td>VI: Hormonal</td>
<td>Estrogen therapy, estrogen-progesterone therapy, osteoporosis</td>
<td><strong>Graded case discussion</strong></td>
</tr>
<tr>
<td>#12 Mar 29-Apr 4</td>
<td>manipulation</td>
<td>Pharmacological contraceptive options</td>
<td>due 4/9 (11:55p)</td>
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<tr>
<td>#13 Apr 5-11</td>
<td>VII: Neuropsych</td>
<td>Pharmacological pain management</td>
<td><strong>Graded discussion</strong></td>
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<tr>
<td>#14 Apr 12-18</td>
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<td>Depression, panic disorder, bipolar disorder</td>
<td>due 4/23</td>
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<tr>
<td>#15 Apr 19-25</td>
<td>VIII: Special topics</td>
<td>Professional issues</td>
<td><strong>Ungraded discussion</strong></td>
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<td>#16 Apr 26-May 4</td>
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<td>Study for exam!</td>
<td><strong>Unit VI/VII Exam</strong></td>
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<td>(TIMED for 90 minutes,)</td>
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<td>one entry only)</td>
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<td>Open: 5/1 (12:01a)</td>
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<td>Closes: 5/4 (11:55p)</td>
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<td>Course closes 5/8 (11:55p)</td>
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* Exam due date extended due to Spring Break.