APPLIED PHARMACOLOGY FOR PRIMARY CARE
NUR 809
Section 731-737
3 Credits
On-Line
Summer 2012

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 impact 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

Professional Standards & Guidelines: The curriculum is guided by the following documents:
Faculty: Katherine Dontje, PhD, FNP-BC
Assistant Professor
Office: A207 Life Sciences
Phone: 517-432-0023
Toll Free No. 1-800-605-6524
E-mail: kathy.dontje@hc.msu.edu
Office hours by appointment
Note: Office hours can be arranged to accommodate student schedules.

Kierstan Hanson, PharmD, BCPS

Toll Free No. 1-800-605-6524
E-mail: Kierstan.hanson@hc.msu.edu
Office hours by appointment
Note: Office hours can be arranged to accommodate student schedules.

Instruction:

a. Required Texts:


AND

**The Prescriber's Letter:** a monthly update of pharmacology news as well as a password protected electronic resource with extensive pharmacological information. You will have weekly required readings from the website. Each student is expected to subscribe to the publication. You will need to subscribe by going to the website [http://www.prescribersletter.com](http://www.prescribersletter.com). You may be able to obtain a subscription as a student. You only need to subscribe to the Prescriber's Letter although the site has a variety of other publications available.

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.

Required Resources, References, and 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](http://angel.msu.edu), login, and click on the Online Teaching/Learning-ANGEL group for examples of etiquette 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/](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/handbooks.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

Instruction:

a. Methodology:

NUR 809 uses an online format which serves as a web-based classroom. The course content can be accessed by students when it is convenient to their individual schedules.

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

As you look at the agenda for each module (found under lessons); you will find readings, lecture content, cases and discussion areas. It is advised that you check in on the class frequently since it is also a place where the instructors 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 to the system. The University has a rule that students 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 location. Make sure to spend some time orienting 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:

- 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 related to ethics of prescribing.
- Check in frequently since we will use the announcements and e-mails to inform you about readings, new web sites, changes in schedule etc.
Remember that the discussion forums are OPEN to many people in the course so your more private conversations with either faculty or other students should be done via email. If you present real clinical cases, please adhere to HIPAA guidelines and protect the anonymity of your patient.  
If you find some new websites or articles that you think others would like to see, please post them, do this in ANGEL by typing the URL in (including the http://). 
It is expected that APA format will be used to cite resources used in the discussion. Discussion forums are part of the scholarly process so the information you post should be from articles or other scholarly references with appropriate citations.

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

b. Evaluation:
Grading
A grade of 3.0 must be achieved in order to pass NUR 809 and progress in the MSU graduate nursing program. 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 rule. Points at \(\geq 0.5\) will be rounded up while those \(< 0.5\) will be rounded down to the nearest whole number.

<table>
<thead>
<tr>
<th>%</th>
<th>GRADE</th>
</tr>
</thead>
<tbody>
<tr>
<td>94 – 100</td>
<td>4.0</td>
</tr>
<tr>
<td>93 - 87</td>
<td>3.5</td>
</tr>
<tr>
<td>86 – 80</td>
<td>3.0</td>
</tr>
<tr>
<td>(Minimum passing grade)</td>
<td></td>
</tr>
<tr>
<td>79 – 75</td>
<td>2.5</td>
</tr>
<tr>
<td>74 – 70</td>
<td>2.0</td>
</tr>
<tr>
<td>69 – 65</td>
<td>1.5</td>
</tr>
<tr>
<td>64– 60</td>
<td>1.0</td>
</tr>
<tr>
<td>Below 60</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Exams: There are 5 quizzes throughout the semester. Each quiz covers one unit of content. Please see the lessons content for more information on the specific timing of each quiz. 
**The final exam will be comprehensive.** 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 **Thursday May 2\textsuperscript{nd} from 12:01pm (this is noon) and close on Thursday August 2\textsuperscript{nd} at 6:00 pm.** This means you have a six hour window of time to access the final exam. **Once you are in the exam you will have 90 minutes to complete the questions.** Times posted are Eastern Standard Time. **Please schedule your exam time into your personal calendar NOW.** The day for the exam cannot be altered so it is important that you have time set aside for taking the final. Unless there is an unexpected emergency EVERYONE is expected to take the exam during the scheduled day (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.
**Discussion**

Discussion is a graded component of the course. There will be four graded discussions in this course. You will find the rubric for grading the discussion in CLASS DOCUMENTS in Angel. Postings must be completed by Sunday at 11:59pm 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. There will also be opportunity for ungraded discussion in some of the modules – this is an excellent learning tool. 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.

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>POINTS POSSIBLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quizzes</td>
<td>50 points</td>
</tr>
<tr>
<td>Discussion Forums</td>
<td>40 points</td>
</tr>
<tr>
<td>Final Exam</td>
<td>50 points</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>140 points</strong></td>
</tr>
</tbody>
</table>

**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/](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](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).

**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](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

The calendar for assignments and content is available within the course. Classes begin the week of May 14th and end August 5th. You will be able to access the course at http://angel.msu.edu anytime from 12:01am on May 14th.

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>Module/Dates</th>
<th>Unit</th>
<th>Topics</th>
<th>Assessments</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1 May 14-20(^{th})</td>
<td>Principles Review</td>
<td>Pharmacokinetics and Pharmacodynamics Cost and ethics of prescribing Adherence Drug safety and AED Prescription writing</td>
<td>Graded Discussion</td>
</tr>
<tr>
<td># 2 May 21-June 4th</td>
<td>CNS agents and Psychotropic agents</td>
<td>Mood Disorders, Anxiety Disorders</td>
<td>Quiz</td>
</tr>
<tr>
<td># 3 June 5(^{th})-10th</td>
<td>Drugs for Inflammatory processes and chronic pain issues</td>
<td>Analgesics Drug Scheduling</td>
<td>Graded Discussion</td>
</tr>
<tr>
<td># 4 June 11(^{th}) – 24th</td>
<td>Cardiovascular</td>
<td>HTN, Hyperlipidemia, Heart failure</td>
<td>Quiz</td>
</tr>
<tr>
<td>#5 June 25th-July 1(^{st})</td>
<td>Respiratory</td>
<td>Asthma, COPD</td>
<td>Graded Discussion</td>
</tr>
<tr>
<td>#6 July 2(^{nd}) – 8th</td>
<td>Gastrointestinal</td>
<td>GERD, Peptic Ulcers, Constipation and Diarrhea</td>
<td>Quiz</td>
</tr>
<tr>
<td># 7 July 9(^{th}) – 15th</td>
<td>Endocrine</td>
<td>Type 1 DM, Type 2 DM Thyroid Disorders</td>
<td>Quiz</td>
</tr>
<tr>
<td># July 16(^{th}) – 22nd</td>
<td>Reproductive Issues and Menopause</td>
<td>Contraception Menopause hormone therapy Osteoporosis</td>
<td>Graded Discussion</td>
</tr>
<tr>
<td># 9 July 23(^{rd}) – 29th</td>
<td>Drugs used in treating infectious disease</td>
<td>Antibiotics, antivirals and antifungals</td>
<td>Quiz</td>
</tr>
<tr>
<td>Final exam week</td>
<td></td>
<td>No new content</td>
<td>Final Exam - Cumulative Open: Thurs, Aug. 2nd– 12:00 pm until 6:00 pm</td>
</tr>
</tbody>
</table>