This is a tentative syllabus and is subject to change. The final syllabus will be available in Desire2Learn in January 2013.

Pharmacology (PHA 321)

South Dakota State University
Section 03D, Internet delivery, Spring 2013

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The preferred methods of communication are through D2L e-mail or my office phone. If D2L is down, you can e-mail me at Teresa.Seefeldt@sdstate.edu. I will check my e-mail daily, and you should expect a response to your e-mail by the end of the following day. I expect you to communicate with the other students in the course via D2L e-mail and the discussion groups.

Credit Hours: 3

Course Description:

Catalog Description: Basics of pharmacology and therapeutics for nurses and others.

Course Summary: This course will cover the basics of pharmacology for health professions students focusing on medication use, mechanisms of drug action, and effects of medications. The nurse's responsibility in the provision of appropriate drug therapy plays an integral part in patient care. Therefore, it is essential for nurses to have a background in pharmacology. This course will cover basic pharmacological principles followed by examination of medication use in specific disease states. A review of the pathophysiology of these disease states will also be conducted.

Course Goals:

1. Students will understand the basics of pharmacology and how medications work.
2. Students will understand the role that nurses and other health professionals play in the provision of appropriate drug therapy.

Student Learning Outcomes:

As a result of successfully completing this course, the student should be able to:

1. State how medications are classified (pharmacologically, chemically, by body system, and by clinical use).
2. Describe the physiologic effects of medications and their mechanisms of drug action.
3. Explain the most common adverse effects, drug interactions, warnings, and contraindications associated with medications.

4. Describe considerations for drug administration and monitoring for medications. Students will be assessed on these outcomes using examinations and quizzes.

IDEA Survey Objectives:
The following IDEA survey objectives are considered essential or important for this course:
   1. Gaining factual knowledge (terminology, classifications, methods, trends).
   2. Learning fundamental principles, generalizations, and theories.
   3. Learning to apply course material (to improve thinking, problem solving, and decisions).

Course Prerequisites:
CHEM 108 Organic and Biochemistry (or equivalent)
BIOL 325 Physiology (current or equivalent)
NURS 323 Pathophysiology (or equivalent)

A basic understanding of biochemistry is essential to understand how drugs exert their activity in the body. Most drugs work by interacting with receptors, enzymes, etc., which are large, complex biochemical molecules. It is these interactions that cause some type of change that can lead to positive as well as negative outcomes. It is also essential that the student have an understanding of human physiology as most drugs have an effect on physiological processes. An understanding of the pathophysiology of various disease states will help to understand the effects of drugs on those disease states.

Students will be expected to possess basic technology skills including word processing and Internet usage. Desire2Learn (D2L) will be used to deliver this course (http://d2l.sdbor.edu). It is essential to check D2L regularly (at least three times a week) for course information and materials.

Description of Instructional Methods:
This is an Internet delivered course. Topics will be covered using the required textbook and notes provided on D2L. Narrated slide shows will also be used to facilitate instruction. Review sessions will be held via Collaborate weekly.

The course will utilize a similar approach as the textbook in using a prototype approach. This means that one drug from each drug class will be identified as the prototype. This prototype will be representative of the other medications in that class. So instead of memorizing details about all of the drugs in a class, we can focus on the details of one drug that represents the class. In some instances, more than one drug will be used as a prototype or the prototype that I select may differ from the one used in the textbook. Prototype drugs are emphasized in the course outlines in red. You are only responsible for knowing generic names of medications. The brand names are provided...
on the outlines for information only. The exams will include both generic and brand names for reference.

D2L Instructions:
D2L will be utilized for the delivery of this course (http://d2l.sdbor.edu). It is essential to check D2L regularly for course information and materials. You will need Acrobat Reader for reading PDF files. To download this program, visit http://learn.sdstate.edu/online/require.htm. All exams will be taken on-line using D2L. For assistance in the use of D2L, visit the student guide for D2L located on the D2L website. For technology support, you may contact the help desk at (605) 699-6776 or SDSU.supportdesk@sdstate.edu. If you are having difficulty playing the recorded PowerPoint lectures, make sure you have the latest version of Java by visiting www.java.com. To use the distance library resources of SDSU, visit http://lib.sdstate.edu. You may call the library at 1-800-786-2038 for more information about accessing library resources from off-campus. For general student support services, visit the SDSU homepage or MyState Online.

Under the course content page of D2L, you will find the course topics listed. The topics will be posted in sections corresponding to each exam's content. The notes for each topic are provided for you on this page in html format. In addition, narrated PowerPoints will be used for certain topics in the course. To play these PowerPoint presentations, you will need a computer with some type of internal or external speakers to hear the sound. Exam dates are listed on the course schedule in D2L as well as in the examination section of the syllabus. A glossary is provided on D2L to assist you in learning terminology relevant to medication use. Several useful links are provided on the Links page. All times listed in D2L are in Central Time.

Text:
The required textbook is Pharmacology for Nursing Care 8th edition by Lehne (ISBN 978-1-4377-3582-6). It is also recommended that you have access to a physiology text, a pathophysiology text, a nursing drug reference, and a medical dictionary.

Academic Dishonesty:
Cheating on an examination or plagiarism in written assignments will not be tolerated. Any student found to be in violation should expect a failing grade in the course and the College and/or University may take other appropriate action. Refer to the SDSU Undergraduate Bulletin for further information.

Freedom in Learning:
Under Board of Regents and University policy, student academic performance may be evaluated solely on an academic basis, not on opinions or conduct in matters unrelated to academic standards. Students should be free to take reasoned exception to the data or views offered in any course of study and to reserve judgment about matters of opinion,
but they are responsible for learning the content of any course of study for which they are enrolled. Students who believe that an academic evaluation reflects prejudiced or capricious consideration of student opinions or conduct unrelated to academic standards should first contact the instructor of the course to initiate a review of the evaluation. If the student remains unsatisfied, the student may contact the department head and/or dean of the college which offers the class to initiate a review of the evaluation.

Examinations and Quizzes:

The format for exams will largely consist of multi-format questions including multiple choice, true-false, multiple-select and matching. There will be five 100-point examinations. The final exam is not a comprehensive final. Examinations will be conducted on D2L. You will have 1 hour and 15 minutes to complete the exam; exam submission will not be allowed after the time limit has passed. Books, notes, and other references are not to be used during an examination. If technical issues arise during an examination, please contact the instructor as soon as possible so that the problem can be resolved. West River nursing students will take their exams as a group in a classroom proctored by a nursing faculty member. All other students are required to find a proctor for their exams. Proctor agreement forms can be found on D2L. In order to pass the class, each student must achieve an exam average of 69.5%.

Exam 1: TBA
Exam 2: TBA
Exam 3: TBA
Exam 4: TBA
Exam 5: TBA

Quizzes are worth 10 points each and will be available for one week. The quizzes are open book and open notes and do not require a proctor. The quizzes are used to help you keep up with the course material, assess your preparedness for exams, and to become familiar with the type of questions asked. In addition, a practice quiz (not graded) is available for you to try out on-line test taking prior to the first quiz.

A syllabus quiz will be held at the beginning of the semester. This will be done to help students understand the course policies and will cover the information in the syllabus, course schedule, and course introduction video. This quiz will be worth 10 points.

Missed Examinations:

Make-up examinations may be taken only due to unavoidable circumstances and if approved by the instructor. The make-up exam should be taken early if possible. Make-up exams can be of any format. A student who misses an exam for which a make-up is not allowed will be given a score of zero for that particular examination.
Point Distribution:
- Examinations (100 points each) 500 points
- Quizzes (10 points each) 100 points
- Total Points 600

Grading Scale:
- The standard grading scale will be used for this course.
  - 90-100% = A
  - 80-89% = B
  - 70-79% = C
  - 60-69% = D
  - <60% = F

Borderline letter grades may be adjusted upwards at the discretion of the instructor and will depend on the final exam results and class participation. No individual extra credit will be allowed in order to raise a grade. In order to pass the class, each student must achieve an exam average of 69.5%.

Accommodations:
- Students who would like to discuss the need for reasonable accommodations in this class should contact the instructor or Nancy Crooks, Coordinator of Disability Services, Administration 102. Phone 688-4504. Timely notification is important.
<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Exam 1 Content</strong></td>
</tr>
<tr>
<td>Week 1</td>
<td>Chapter 1. Orientation to Pharmacology</td>
</tr>
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<td>Chapter 3. Drug Regulation, Development, Names, and Information</td>
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<td>Chapter 4. Pharmacokinetics</td>
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<td>Week 2</td>
<td>Chapter 5. Pharmacodynamics</td>
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<td>Chapter 6. Drug Interactions</td>
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<td>Chapter 7. Adverse Drug Reactions and Medication Errors</td>
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<td>Week 3</td>
<td>Chapter 8. Individual Variations in Drug Response</td>
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<td>Chapter 9. Drug Therapy During Pregnancy and Lactation</td>
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<td>Chapter 10. Drug Therapy in Pediatric Patients</td>
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<td>Chapter 11. Drug Therapy in Geriatric Patients</td>
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<td><strong>Exam 2 Content</strong></td>
</tr>
<tr>
<td>Week 4</td>
<td>Chapter 12. Basic Principles of Neuropharmacology</td>
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<td>Chapter 13. Physiology of the Peripheral Nervous System</td>
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<tr>
<td>Week 5</td>
<td>Chapter 14. Muscarinic Agonists and Antagonists</td>
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<td></td>
<td>Chapter 15. Cholinesterase Inhibitors</td>
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<td></td>
<td>Chapter 16. Neuromuscular Blocking Agents and Ganglionic Blocking Agents</td>
</tr>
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<td>Week 6</td>
<td>Chapter 43. Review of Hemodynamics</td>
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<td>Chapter 17. Adrenergic Agonists</td>
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<tr>
<td></td>
<td>Chapter 18. Adrenergic Antagonists</td>
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<td>Chapter 19. Indirect-Acting Antiadrenergic Agents</td>
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<td></td>
<td><strong>Exam 3 Content</strong></td>
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<tr>
<td>Week 7</td>
<td>Chapter 41. Diuretics</td>
</tr>
<tr>
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<td>Chapter 44. Drugs Acting on the Renin-Angiotensin-Aldosterone System</td>
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<td></td>
<td>Chapter 45. Calcium Channel Blockers</td>
</tr>
<tr>
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<td>Chapter 46. Vasodilators</td>
</tr>
<tr>
<td>Week 8</td>
<td>Chapter 47. Hypertension</td>
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<td>Chapter 48. Heart Failure</td>
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<td>Chapter 49. Antidysrhythmic Drugs</td>
</tr>
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<td>Chapter 51. Drugs for Angina Pectoris</td>
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<tr>
<td>Week 9</td>
<td>Chapter 50. Drugs for Dyslipidemias</td>
</tr>
<tr>
<td>Chapter 52</td>
<td>Anticoagulant, Antiplatelet, and Thrombolytic Drugs</td>
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<tr>
<td>Chapter 53</td>
<td>Management of ST-Elevation Myocardial Infarction</td>
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**Exam 4 Content**

**Week 10**
- Chapter 57. Drugs for Diabetes Mellitus
- Chapter 71. Cyclooxygenase Inhibitors: NSAIDs and Acetaminophen
- Chapter 72. Glucocorticoids

**Week 11**
- Chapter 75. Drugs for Asthma
- Chapter 28. Opioid Analgesics and Opioid Antagonists
- Chapter 31. Antipsychotic Agents and Their Use in Schizophrenia

**Week 12**
- Chapter 32. Antidepressants/Chapter 33. Drugs for Bipolar Disorder
- Chapters 34 and 35. Sedative-Hypnotic-Anxiolytic Drugs

**Exam 5 Content**

**Week 13**
- Chapter 83. Basic Principles of Antimicrobial Therapy
- Chapter 84. Penicillins
- Chapter 85. Other Cell Wall Active Antibiotics

**Week 14**
- Chapter 86. Bacteriostatic Inhibitors of Protein Synthesis
- Chapter 87. Aminoglycosides
- Chapter 88. Sulfonamides and Trimethoprim
- Chapter 91. Miscellaneous Antibacterial Drugs

**Week 15**
- Chapter 92. Antifungal Agents
- Chapter 93. Antiviral Agents
- Chapter 94. Drugs for HIV Infection