

**MIDSTATE COLLEGE**  
411 W. Northmoor Road  
(309) 692-4092 (800) 251-4299  
(Fall 2012)

**COURSE:** AH 210 Pharmacology

**CREDIT HOURS:** 4 quarter hours

**METHOD OF DELIVERY:** Hybrid

**COURSE DESCRIPTION:** Pharmacology studies classification and forms of drugs. Drug action, use, adverse reactions, and side effects are discussed. Special emphasis will be placed on those drugs most frequently prescribed and emergency drugs. Writing prescriptions, recordkeeping, safety issues, and reordering is covered, drug laws and substance abuse are examined.

**PREREQUISITE:** Completion of an anatomy course.

**TEXT:** Core Concepts in Pharmacology, 2<sup>nd</sup> edition, ISBN: #0131714732

**AUTHOR:** Norman Holland; Michael Adams

**PUBLISHER:** Pearson Prentice Hall Co.

**TEXT:** Nursing 2009 Drug Handbook, ISBN:0781792886

**PUBLISHER:** Wolters Kluwer/ Lippincott Williams Wilkins

**REQUIREMENTS FOR COMPLETING COURSE:** Students must complete assessment tools to the satisfaction of the instructor and standard departmental AH 210 exams. Department policy prohibits extra credit work. Required curriculum in all three learning domains (cognitive, psychomotor and affective) is listed under learning objectives and coded by assessment tool. T = test, W = worksheet, W\* = worksheet and work product. Required curriculum topics are followed by numerical mapping to Core Curriculum 2008.

**TOPICS:** History of pharmacology, prescriptions and refills, the relationship between anatomy & physiology of body systems and medications used for treatment in each, medication orders on chart and by phone, forms and routes of administration, illicit drugs & substance abuse costs.

**LEARNING OBJECTIVES:** Upon completion of this course, the student will be able to:

1. **T** identify the classifications of 100 most commonly prescribed medications, including trade & generic names, indication for use, side effects and adverse reactions. **C I (11)**
2. **T** identify major drug laws and describe the role of the FDA & DEA. **C IX (13)**
3. **T** access drug information in current drug references. **MSC**
4. **T** describe the relationship between anatomy and physiology of all body systems and medication used for treatment of each. **C I (12)**
5. **T** recognize the importance of local, state, and federal legislation in the practice setting. **A IX (3)**
  - a. **T** apply local, state and federal health care legislation and regulation appropriate to the medical assisting practice setting. **C IX (8)**
  - b. **T** recognize the legal and ethical responsibilities facing the Medical Assistant in dealing with medications and perform within scope of practice. **P IX (2)**

**MIDSTATE GRADING SCALE:**

90 - 100 A

80 - 89 B

70 - 79 C

60 - 69 D

0 - 59 F

**MIDSTATE PLAGIARISM POLICY:**

Plagiarism is using another person's words without giving credit to the author. Original speeches, publications, and artistic creations are sources for research. If students use the author's words in a paper or assignment, they must acknowledge the source. Plagiarism is strictly against the academic policy of the college and is grounds for failing the course. If repeated, plagiarism may result in suspension from the college. (See the Midstate College catalog and/or Student Handbook for additional information.)

In courses containing writing assignments, the college promotes the use of an electronic resource which compares the student's writing against previously submitted papers, journals, periodicals, books, and web pages. Students and instructors can use this service to reduce the incidence of plagiarism. This electronic resource has been found to conform to legal requirements for fair use and student confidentiality. It is able to provide a report to the student indicating the parts of the assignment that match.

This is a standardized syllabus for AH 210. All modifications will be made by the program director to maintain consistency. Syllabus form 5/09 jlh

**AH 210**  
**Fall 2012**

**Instructor Information:** Joanna Holly

Office 204 Hours: Posted each quarter

Phone: 309-692-4092; Voice mail 309-208-6980

**Participation Requirements**

1. This is a hybrid class. You will be expected to come to campus for examinations. If you cannot come to campus because you are residing over 90 miles away,, you may obtain a proctor to supervise your testing. The proctor must complete the attached proctor application form and mail or fax it to me. The address is at the top of this syllabus. The fax number is 1-309-692-3893. Not all persons qualify to proctor off campus. See additional attachments.
2. You must post to each discussion forum twice to receive maximum discussion points on the selected topic each week. That means you must read and participate. I will not accept, "I agree"
3. You must post the weekly work sheet to the drop box each week.
4. You must post a summary each week of 10 facts you have learned. This can be a real advantage in testing.
3. You must read your chapters and be willing to devote time to memorizing information. **Expect to spend 10-12 hours each week on this class. This class requires much self-discipline.**

**Policies and Procedures:**

1. All work is to be completed on time. You are expected to use your notes from the lecture to study for tests. That means **you need to read the chapters and listen to lecture.** Ask questions.
2. If you miss a test or are late turning in an assignment, you will be expected to make it up within the next week. After that, your grade will drop 10% each week that it is late. For example, if a test is worth 100 points and you take it 2 weeks late, the best you can do is 90%. If you take the same test 3 weeks late, the best you can do is 80%. **Work will not be accepted more than 2 weeks late.**
3. Academic dishonesty is never tolerated and will be promptly referred to the Dean of College.
4. Black ink must be used on all written assignments. Paper should never be torn and frayed. Your work is how you present yourself on paper. All work needs your first and last names and the date.
5. I will get a review sheet to you before each test. Your responsibility is to study before a test. This is not a course where you can breeze through without studying on your own.

**Method of Evaluating Student Performance:** This class will have 4 tests, a final exam, 10 drug worksheets, 10 discussions to post, 10 summaries, an exercise in using drug resource guides, and a research paper. Please note that there is an explanation of how to do the paper & a grading rubric for the research paper attached. This tells how the paper will be evaluated. You are expected to work independently on this paper.

**Examination Information:** Unit examinations & Final exam are short essay, multiple choice and matching. Exams will be taken on campus or with a proctor.

**Instructor's grading information:** As stated earlier, I will use the Midstate Grading scale. If you do not turn in original work on your research paper, you will receive a zero. Make certain that you attribute information to the proper source using quotes and a bibliography. Your grade will be calculated in the following manner:

Four tests @ 100 points each	400 points
Final Exam	100 points
10 Summary Worksheets	100 points
Research Paper	100 points
Resource guide project	100 points
10 Discussion Post	100 points
10 summaries	<u>100 points</u>
	1000 points

**Course Schedule**

**Fall 2012**

**NOTE: CHAPTER ASSIGNMENTS ARE NOT IN ORDER OF TEXT**

<p><b>Week 1</b></p>	<p><b>Topics</b></p> <ol style="list-style-type: none"><li>History of pharmacology, laws &amp; standards</li><li>Prescriptions and refills in the outpatient office</li><li>Purpose of various drug forms, pharmacodynamics, &amp; pharmacokinetics</li><li>Commonly prescribed medications for <i>anxiety and sleep disorders</i>, indications for their use, common side effects, interactions, and contraindications</li><li>Use of nurse's reference guide and PDR</li></ol> <p><b>Objectives</b></p> <ol style="list-style-type: none"><li>Identify major drug laws and their enforcement agencies</li><li>Recognize commonly prescribed drugs, their trade and generic names, indications, contraindications, &amp; major side effects.</li><li>Recognize the legal and ethical responsibility facing the Medical Assistant in dealing with medications.</li><li>Access drug information in current drug references.</li></ol> <p><b>Assignments</b></p> <ul style="list-style-type: none"><li><b>Read Chapters 1-4 ; Listen to lecture</b></li><li><b>Post an autobiography of yourself on discussion forum.</b></li><li><b>Read posted information on drug resource guides</b></li><li><b>Complete and submit in drug resource guide; You may need to come by my office to use the PDR and get help</b></li><li><b>Submit summary</b></li></ul>
<p><b>Week 2</b></p>	<p><b>Topics</b></p> <ol style="list-style-type: none"><li>Issues related to prevention &amp; the high cost of substance abuse</li><li>Roles of the health professional in handling prescriptions</li><li>Doing patient education.</li><li>Legal and Ethical Responsibilities of Health Care work</li><li>Commonly prescribed medications for anxiety and insomnia, indications for their use, common side effects, interactions, and contraindications</li></ol> <p><b>Objectives</b></p> <ol style="list-style-type: none"><li>List signs, symptoms, &amp; cost of substance abuse.</li><li>Recognize the legal and ethical responsibility facing the Medical Assistant in dealing with medications.</li><li>Recognize commonly prescribed drugs, their trade and generic names, indications, contraindications, &amp; major side effects.</li><li>Describe the role of the health professional in handling medications, dealing w/ prescriptions and doing patient education.</li><li>Identify drug laws.</li></ol> <p><b>Assignment:</b></p> <ul style="list-style-type: none"><li><b>Read Chapters 6 &amp; 8; Listen to lecture</b></li><li><b>Complete and submit Week 2 Worksheet</b></li></ul>

	<ul style="list-style-type: none"> <li>• <b>Submit summary</b></li> </ul>
<p><b>Week 3</b></p>	<p><b>Topics</b></p> <ol style="list-style-type: none"> <li>a. Review of mental illnesses: Depression, Bipolar, Anxiety, Psychoses, Somatization Disorder, OCD, Panic Disorder, Schizophrenia, ADHD. (cause, signs &amp; sx, &amp; tx opportunities)</li> <li>b. Commonly prescribed medications for mental health illnesses, indications for their use, common side effects, interactions, and contraindication.</li> </ol> <p><b>Objectives:</b></p> <ol style="list-style-type: none"> <li>a. Recognize commonly prescribed drugs, their trade and generic names, indications, contraindications,&amp; major side effects.</li> <li>b. Recognize the legal &amp; ethical responsibility facing the Medical Assistant in dealing with medications.</li> <li>c. Recognize commonly prescribed drug categories and indications for use.</li> </ol> <p>Assignment:</p> <ul style="list-style-type: none"> <li>• <b>Read Chapters 7 &amp; 9 &amp;10; Listen to lecture</b></li> <li>• <b>Respond to posted discussion forum</b></li> <li>• <b>Complete and submit Week 3 Worksheet</b></li> <li>• <b>Submit summary</b></li> </ul>
<p><b>Week 4</b></p>	<p><b>Topics:</b></p> <ol style="list-style-type: none"> <li>a. Review of the neurological system and illnesses</li> <li>b. Commonly prescribed medications for neurological illness and minor surgery, indications for their use, common side effects, interactions, and contraindications.</li> </ol> <p><b>Objectives:</b></p> <ol style="list-style-type: none"> <li>a. Recognize commonly prescribed drugs, their trade and generic names, indications, contraindications,&amp; major side effects.</li> <li>b. Recognize the legal &amp; ethical responsibility facing the Medical Assistant in dealing with medications.</li> <li>c. Recognize commonly prescribed drug categories and indications for use.</li> </ol> <p>Assignment:</p> <ul style="list-style-type: none"> <li>• <b>Take Test I</b></li> <li>• <b>Read Chapter 11; Listen to lecture</b></li> <li>• <b>Respond to posted discussion forum</b></li> <li>• <b>Complete and submit Week 4 Worksheet</b></li> <li>• <b>Submit summary</b></li> </ul>

<p><b>Week 5</b></p>	<p>Topics:</p> <ol style="list-style-type: none"> <li>a. Review of pain and relief of discomfort</li> <li>b. Commonly prescribed medications, indications for their use, common side effects, interactions, contraindications.</li> </ol> <p>Objectives:</p> <ol style="list-style-type: none"> <li>a. Recognize commonly prescribed drugs, their trade and generic names, indications, contraindications, &amp; major side effects.</li> <li>b. Recognize the legal &amp; ethical responsibility facing the Medical Assistant in dealing with medications.</li> <li>c. Recognize commonly prescribed drug categories and indications for use.</li> </ol> <p>Assignment:</p> <ul style="list-style-type: none"> <li>• <b>Read Chapter 12 &amp; 13; Listen to lecture</b></li> <li>• <b>Respond to posted discussion forum</b></li> <li>• <b>Complete and submit Week 5 Worksheet</b></li> <li>• <b>Submit summary</b></li> </ul>
<p><b>Week 6</b></p>	<p><b>Topics</b></p> <ol style="list-style-type: none"> <li>a. Review of body system &amp; disorders of muscle and joints, skin and eyes and ears</li> <li>b. Commonly prescribed medications, indications for their use, common side effects, interactions, contraindications.</li> </ol> <p>Objectives:</p> <ol style="list-style-type: none"> <li>a. Recognize commonly prescribed drugs, their trade and generic names, indications, contraindications, &amp; major side effects.</li> <li>b. Recognize the legal &amp; ethical responsibility facing the Medical Assistant in dealing with medications.</li> <li>c. Recognize commonly prescribed drug categories and indications for use.</li> </ol> <p>Assignment:</p> <ul style="list-style-type: none"> <li>• <b>Read Chapters 31, 32, &amp; 33 ; Listen to lecture</b></li> <li>• <b>Respond to posted discussion forum</b></li> <li>• <b>Complete and submit Week 6 Worksheet</b></li> <li>• <b>Submit summary</b></li> </ul>

<p><b>Week 7</b></p>	<p><b>Topics:</b></p> <ol style="list-style-type: none"> <li>a. Review of cardiac system and disorders of blood vessels and rhythm.</li> <li>b. Commonly prescribed medications, indications for their use, common side effects, interactions, contraindications</li> </ol> <p><b>Objectives:</b></p> <ol style="list-style-type: none"> <li>a. Recognize commonly prescribed drugs, their trade and generic names, indications, contraindications,&amp; major side effects.</li> <li>b. Recognize the legal &amp; ethical responsibility facing the Medical Assistant in dealing with medications.</li> <li>c. Recognize commonly prescribed drug categories and indications for use.</li> </ol> <p><b>Assignment:</b></p> <ul style="list-style-type: none"> <li>• <b>Take Test II</b></li> <li>• <b>Read Chapters 14 thru 18; Listen to lecture</b></li> <li>• <b>Respond to posted discussion forum</b></li> <li>• <b>Complete and submit Week 7 Worksheet</b></li> <li>• <b>Submit summary</b></li> </ul>
<p><b>Week 8</b></p>	<p><b>Topics:</b></p> <ol style="list-style-type: none"> <li>a. Review of cardiac system and disorders of insufficient blood flow &amp; hyperlipidemia.</li> <li>b. Review of Pulmonary system</li> <li>c. Commonly prescribed medications, indications for their use, common side effects, interactions, contraindications.</li> </ol> <p><b>Objectives:</b></p> <ol style="list-style-type: none"> <li>a. Recognize commonly prescribed drugs, their trade and generic names, indications, contraindications,&amp; major side effects.</li> <li>b. Recognize the legal &amp; ethical responsibility facing the Medical Assistant in dealing with medications.</li> <li>c. Recognize commonly prescribed drug categories and indications for use.</li> </ol> <p><b>Assignment:</b></p> <ul style="list-style-type: none"> <li>• <b>Read Chapters 19, 20 &amp; 25 ; Listen to lecture</b></li> <li>• <b>Respond to posted discussion forum</b></li> <li>• <b>Complete and submit Week 8 Worksheet</b></li> <li>• <b>Submit summary</b></li> </ul>
<p><b>Week 9</b></p>	<p><b>Topic:</b></p> <ol style="list-style-type: none"> <li>a. Review of inflammation and allergies</li> <li>b. Review of infection and infectious illnesses</li> <li>c. Review of Cancer</li> </ol> <p><b>Objectives:</b></p> <ol style="list-style-type: none"> <li>a. Recognize commonly prescribed drugs, their trade and generic names, indications, contraindications,&amp; major side effects.</li> <li>b. Recognize the legal &amp; ethical responsibility facing the Medical Assistant in dealing with medications.</li> <li>c. Recognize commonly prescribed drug categories and indications for use.</li> <li>d. History of pharmacology; Laws and standards</li> </ol>

	<p><b>Assignment:</b></p> <ul style="list-style-type: none"> <li>• <b>Take Test III</b></li> <li>• <b>Read Chapters 21, 22, 23, &amp; 24 ; Listen to lecture</b></li> <li>• <b>Respond to posted discussion forum</b></li> <li>• <b>Complete and submit Week 9 Worksheet</b></li> <li>• <b>Submit summary</b></li> </ul>
<p><b>Week 10</b></p>	<p><b>Topics</b></p> <ol style="list-style-type: none"> <li>a. Review of vitamins &amp; fluid imbalances</li> <li>b. Review of Gastrointestinal system and GI disorders</li> <li>c. Commonly prescribed medications, indications for their use, common side effects, interactions, contraindications.</li> </ol> <p><b>Objectives:</b></p> <ol style="list-style-type: none"> <li>a. Recognize commonly prescribed drugs, their trade and generic names, indications, contraindications,&amp; major side effects.</li> <li>b. Recognize the legal &amp; ethical responsibility facing the Medical Assistant in dealing with medications.</li> <li>c. Recognize commonly prescribed drug categories and indications for use.</li> </ol> <p><b>Assignment:</b></p> <ul style="list-style-type: none"> <li>• <b>Read Chapters 26 ,27, 28 Listen to lecture</b></li> <li>• <b>Respond to posted discussion forum</b></li> <li>• <b>Complete and submit Week 10 Worksheet</b></li> <li>• <b>Submit summary</b></li> <li>• <b>RESEARCH PAPER due for submission</b></li> </ul>
<p><b>Week 11</b></p>	<p><b>Topics:</b></p> <ol style="list-style-type: none"> <li>a. Review of the endocrine and reproductive system and disorder</li> <li>b. Commonly prescribed medications for treating endocrine &amp; reproductive disorders, fluid or electrolyte imbalance, &amp; nutritional deficiencies, indications for their use, common side effects, interactions &amp; contraindications.</li> </ol> <p><b>Objectives:</b></p> <ol style="list-style-type: none"> <li>a. Recognize commonly prescribed drugs, their trade and generic names, indications, contraindications,&amp; major side effects.</li> <li>b. Recognize the legal &amp; ethical responsibility facing the Medical Assistant in dealing with medications.</li> <li>c. Recognize commonly prescribed drug categories and indications for use.</li> </ol> <p><b>Assignment:</b></p> <ul style="list-style-type: none"> <li>• <b>Read Chapters 29 &amp; 30; Listen to lecture</b></li> <li>• <b>Respond to posted discussion forum</b></li> <li>• <b>Complete and submit Week 10 Worksheet</b></li> <li>• <b>Submit summary</b></li> <li>• <b>Take TEST 4</b></li> </ul>
<p><b>Week 12</b></p>	<p>Final examination</p>

MIDSTATE COLLEGE  
411 W. Northmoor Road  
Peoria, Illinois 61614

I am willing to proctor tests for (name) \_\_\_\_\_ because I believe coming to campus would be impossible or a hardship.

I am either a teacher, librarian, clergy person, or employed in HRD. (please circle one)

My name is \_\_\_\_\_.

My address is \_\_\_\_\_.

I am employed by \_\_\_\_\_.

I am in no way related to the student whose test I will proctor. \_\_\_\_\_

I agree to monitor the testing process and allow no notes or textbooks to be used. The testing student will be under my direct supervision.

I am willing to send the test via mail without returning it to the student. I understand that all tests have a 60 minute limit but are usually much shorter.

Signature \_\_\_\_\_ Date \_\_\_\_\_

## Research Paper Directions and Topic Options

You are to write an original research paper exploring a topic in pharmacy. It should be 4-6 pages long excluding the bibliography, title page, pictures or graphs, outlines or summary. Use a 12 or 14 point font. Double-space. You should attempt to use the APA format described in your English Handbook. It really isn't much different from MLA format. I have a handout that explains it clearly.

**Plagiarism will not be tolerated. If it isn't your own words, it must be in quotations and attributed to someone else.**

This paper is a chance to assess your responsibility. Do not wait until the last minute. Do not expect the librarian to do your research, however, ask Zack for help if you need help find information. You need to plan ahead for obtaining your resource materials. I expect 6 sources that are within the last 10 years. One may be your text. You may need to ask the librarian to help obtain material from our libraries. Be very careful in using websites. Many are not genuine sources of information. You may use only 3 websites.

Please explain the topic you select in terms that you and classmates will understand. This paper should be research based. There is a rubric on the next page to explain how it will be graded. Possible topics include:

Tardive Dyskinesia  
Neuroleptic Malignant Syndrome  
The purpose of the FDA  
Diabetes Medications and insulin  
Foods as Medication  
Vitamin A  
Antibiotic Resistance  
Formula feeding  
What the DEA does and demands of us...  
Medical Use of cocaine & marijuana  
Buying drugs on internet  
Medical and Recreational Use of Nicotine  
Medical and Recreational Use of Alcohol  
Use and Misuse of Caffeine  
Birth Control Pills  
The arguments for & against Childhood Immunization  
Finding new antibiotics  
Medication Errors  
Use and Misuse of Laxatives  
Ginseng & Ginko Biloba  
Vitamin C  
Use of lavender for sleep and pain  
Anti-anxiety treatment w/ drugs  
Schizophrenia and drug treatment  
Gardasil

Tx of HTN w/ DASH diet  
MRSA  
Aroma Therapy  
Chocolate as a Medicine  
Vaccines for the Elderly  
Use of Procrit  
Use of Aspirin  
Thalidomide  
Methadone  
Reyes Syndrome  
B-12 and Anemia  
Government research w/ LSD  
Anti-viral research  
Anticoagulant drugs  
Native American Medicine  
Placebos  
Vaccinations for kids  
Are generic drugs the same?  
Vaccines for the elderly  
Antidepressant drugs  
Tuskegee Experiment

### Pharmacology Research Paper

NAME \_\_\_\_\_  
TOPIC \_\_\_\_\_

COMPLETED ON DUE DATE \_\_\_\_\_/10

#### CONSTRUCTION

GRAMMAR \_\_\_\_\_/10 (Each error drops you a point)

SPELLING \_\_\_\_\_/10 (Each error drops you a point)

MEETS LENGTH \_\_\_\_\_/5 Paper is to be 4-6 pages long

MEETS SOURCES \_\_\_\_\_/10 6 sources within the last 10 years

ATTEMPTED APA FORMAT \_\_\_\_\_/5

#### CONTENT

PRESENTED COLLEGE LEVEL MATERIAL \_\_\_\_\_/10

COVERED TOPIC ADEQUATELY \_\_\_\_\_/10

PAPER MAKES SENSE TO READ \_\_\_\_\_/10

PRESENTED CORRECT FACTS \_\_\_\_\_/20