

# NURS 3312 01B Principles of Pharmacology

# (with included Pathophysiology)

COURSE SYLLABUS: FALL 2016

Instructor: Cheryl McKenna, MSN, RN Monica L. Tenhunen, DNP, RN, GNP-BC, ANP-C Office Location: Nursing Department Office Hours: as posted and by appointment Office Phone: 903-886-5315 Office Fax: 903-886-5729 University Email Address: cheryl.mckenna@tamuc.edu monica.tenhunen@tamuc.edu

**Preferred Form of Communication:** email **Communication Response Time:** Two business days

# **COURSE INFORMATION**

### Materials – Textbooks, Readings, Supplementary Readings

#### **Textbooks Required**

- Gahart, B. & Nazareno, A. R. (2017) 2017 Intravenous medications: A handbook for nurses and health professionals (33rd ed.). St. Louis, MO: Elsevier.
- Gray-Morris, D. (2014) *Calculate with confidence* (6th ed.) St. Louis, MO: Mosby Elsevier.
- Huether, S. E., & McCance, K. L. (2016). *Understanding pathophysiology* (6th ed.). St. Louis, MO: Elsevier.
- Kee, J., Hayes, E., & McCuistion, L. E. (2015) *Pharmacology: A nursing process approach.* (8th ed.). St. Louis, MO: Saunders Elsevier.
- Skidmore-Roth, L. (2017) *Mosby's drug reference for nurses.* St. Louis, MO: Mosby.
- **Optional** Online resources and articles as directed

The syllabus/schedule are subject to change.

### Course Description (3 credit hours)

This course combines two related nursing concepts, pathophysiology, and pharmacology. Pathophysiology relates manifestations of disease, risk factors for disease, and the principles of pathology underlying illness and injury to therapeutic nursing interventions and outcomes. Pharmacology focuses on the basic drug classification, concepts, and principles of pharmacology with special consideration for the nursing role in developing a comprehensive approach to the clinical application of drug therapy using the nursing process. Nursing implications relative to the utilization of drug therapy are examined. Dosage calculations are evaluated for competency.

### Student Learning Outcomes

By the end of the course, the student will be able to:

1. Define basic pharmacological terminology.

2. Apply general concepts of pharmacokinetic and pharmacodynamic processes and their application in drug therapy and the nursing process.

3. Recognize significant adverse drug reactions, drug-drug, and drug-nutrient interactions.

4. Describe major classifications of drugs used in current treatment of disease.

5. Provide patient teaching, regarding drug therapy that reflects rural access, developmental stage, age, culture, and spirituality.

6. Apply principles of normal anatomy and physiology of human body systems to the pathophysiologic processes of common health problems.

7. Identify concepts, principles, and responses related to pathophysiologic processes that result in disease.

8. Discuss clinical manifestations of selected disease processes and health problems.

9. Discuss the nurse's role and responsibility for assessment of individuals

experiencing health problems that result in pathophysiologic alterations.

### **COURSE REQUIREMENTS**

### Minimal Technical Skills Needed

Using the learning management system, using Microsoft Word and PowerPoint.

### Instructional Methods

This is a blended course without lecture requiring students to complete online activities and independent study to be successful. Course objectives may be met through individual study using suggested resources, active involvement in classroom activities, formal, and informal exchange of ideas with classmates and colleagues regarding specific topics as well as utilizing critical thinking skills. Teaching methods include seminar, discussion, small group work, independent study of texts and library resources, computer-assisted instruction, audio-visual aids, return demonstration, clinical assignments and supervision, post clinical conferences and check-off of

The syllabus/schedule are subject to change.

appropriate skills and the assignments listed. While the professor will provide guidance and consultation, the student is responsible for identification of learning needs, selfdirection, seeking consultation and demonstration of course objectives.

### Student Responsibilities or Tips for Success in the Course

Logging into the course website daily during the week, checking emails at least daily, updated semester calendar, at least six hours of weekly study, attendance at all class meetings, and review of examinations.

# GRADING

Final grades in this course will be based on the following scale:

 $\begin{array}{l} A = 90\text{-}100 \\ B = 80\text{-}89 \\ C = 75\text{-}79 \\ D = 67\text{-}74 \\ F = 66 \text{ and Below} \\ A \text{ minimum grade of 75 is required to pass the course.} \end{array}$ 

### DRUG CARD ASSIGNMENT/PATHO PRE-WORK

Admission to Class: students will be required to complete pathophysiology pre-work and complete drug cards on assigned medications. All information must be completed prior to class. Students who do not complete all required preparatory work for class will not be allowed to enter that class.

Exams 7 (12%)	84%
Patho/Pharm Paper	16%
Total	100%

Successful completion of the examinations and paper will enable the student to meet the student learning outcomes.

Students must achieve a minimum average of 75% on all exams in order to pass the course. Other graded assignments will not be added to the final grade unless exam grade average is 75% or higher.

### Late Submissions

It is expected that you will submit all assignments on time. If you need an extension, it should be requested <u>before</u> the due date and may or may not be approved at the discretion of the course coordinator. Unexcused late assignments will be penalized 10% per day for each of the first two days overdue; on the 3rd day, the grade will be assigned as 0%. Communication on these matters is the student's responsibility.

#### Paper submissions

All documents submitted online are to be in .docx, .rtf, or .pdf format. No other formats will be accepted (JPEG, GIF, etc.). Assignments need to be submitted in a maximum of one document per assignment. Failure to follow these guidelines will result in a grade of "0" on the assignment.

# **TECHNOLOGY REQUIREMENTS**

- To fully participate in online courses you will need to use a current Flash enabled internet browser. For PC and Mac users the suggested browser is Mozilla Firefox.
- You will need regular access to a computer with a broadband Internet connection. The minimum computer requirements are:
  - 512 MB of RAM, 1 GB or more preferred
  - o Broadband connection required courses are heavily video intensive
  - Video display capable of high-color 16-bit display 1024 x 768 or higher resolution
- You must have a:
  - Sound card, which is usually integrated into your desktop or laptop computer
  - Speakers or headphones.
  - \*For courses utilizing video-conferencing tools and/or an online proctoring solution, a webcam and microphone are required.
- Both versions of Java (32 bit and 64 bit) must be installed and up to date on your machine. At a minimum Java 7, update 51, is required to support the learning management system. The most current version of Java can be downloaded at: <u>JAVA web site</u> <u>http://www.java.com/en/download/manual.jsp</u>
- Current anti-virus software must be installed and kept up to date.
- Run a browser check through the Pearson LearningStudio Technical Requirements website. <u>Browser Check http://help.ecollege.com/LS\_Tech\_Req\_WebHelp/en-us/#LS\_Technical\_Requirements.htm#Browset</u>

Running the browser check will ensure your internet browser is supported.

Pop-ups are allowed. JavaScript is enabled. Cookies are enabled.

- You will need some additional free software (plug-ins) for enhanced web browsing. Ensure that you download the free versions of the following software:
  - o Adobe Reader https://get.adobe.com/reader/
  - o Adobe Flash Player (version 17 or later) <u>https://get.adobe.com/flashplayer/</u>

The syllabus/schedule are subject to change.

- o Adobe Shockwave Player https://get.adobe.com/shockwave/
- Apple Quick Time <a href="http://www.apple.com/quicktime/download/">http://www.apple.com/quicktime/download/</a>
- At a minimum, you must have Microsoft Office 2013, 2010, 2007 or Open Office. Microsoft Office is the standard office productivity software utilized by faculty, students, and staff. Microsoft Word is the standard word processing software, Microsoft Excel is the standard spreadsheet software, and Microsoft PowerPoint is the standard presentation software. Copying and pasting, along with attaching/uploading documents for assignment submission, will also be required. If you do not have Microsoft Office, you can check with the bookstore to see if they have any student copies.
- For additional information about system requirements, please see: <u>System</u> <u>Requirements for LearningStudio</u> <u>https://secure.ecollege.com/tamuc/index.learn?action=technical</u>

#### myLeo Support

Your myLeo email address is required to send and receive all student correspondence. Please email <u>helpdesk@tamuc.edu</u> or call us at 903-468-6000 with any questions about setting up your myLeo email account. You may also access information at <u>myLeo</u>. <u>https://leo.tamuc.edu</u>

#### Learner Support

The <u>One Stop Shop</u> was created to serve you by providing as many resources as possible in one location. <u>http://www.tamuc.edu/admissions/onestopshop/</u>

The <u>Academic Success Center</u> provides academic resources to help you achieve academic success.

http://www.tamuc.edu/campusLife/campusServices/academicSuccessCenter/

# **COMMUNICATION AND SUPPORT**

### Interaction with Instructor Statement

It is expected that you will check your eCollege course and email at least **DAILY** for communication from the instructor. A response will occur within two (2) business days.

Communication between faculty and students is primary and taken seriously. Preferred communication methods are individualized office hours, email, or via office phone. If a phone call is not answered, please leave a message and send an e-mail using the direct e-mail link on the course home page. You will be treated with collegial respect and you are expected to communicate likewise in a professional manner.

# COURSE AND UNIVERSITY PROCEDURES/POLICIES

### **Course Specific Procedures/Policies**

### CLASS

- 1. Class Cancellation: In the event that a class is canceled, the student is expected to do the readings and complete the objectives for that day. The content will still be included on examinations. The material in this syllabus and dates identified in the Course Calendar are subject to change.
- 2. Class attendance is expected. The students should notify course faculty in advance of any absence.
- 3. Exam dates are listed in each course syllabus, and the student is expected to be present for exams. In the event that the student will be absent, the course instructor must be notified in advance. Failure to do so may result in the student receiving a zero for the missed exam or quiz. Review the university catalog for excused absence criteria.
- 4. As an adult learner and responsible professional, the student is responsible for reading and completing assignments prior to class and for being prepared to participate in discussions over the assigned material. It should not be expected that all material would be covered in class. Students are expected to come to class prepared.
- 5. Assignments must be handed in on time. Assignments submitted late without prior arrangement with the classroom instructor will receive a zero.

## Syllabus Change Policy

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

## **University Specific Procedures**

## Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the <u>Student Guidebook</u>. <u>http://www.tamuc.edu/admissions/registrar/documents/studentGuidebook.pdf</u>

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: <u>Netiquette</u> <u>http://www.albion.com/netiquette/corerules.html</u>

## TAMUC Attendance

For more information about the attendance policy please visit the <u>Attendance</u> webpage and <u>Procedure 13.99.99.R0.01</u>.

http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf

## Academic Integrity

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

Undergraduate Academic Dishonesty 13.99.99.R0.03

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf

Graduate Student Academic Dishonesty 13.99.99.R0.10

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/graduate/13.99.99.R0.10GraduateStudentAcademicDishonesty.pdf

## ADA Statement

### **Students with Disabilities**

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

## **Office of Student Disability Resources and Services**

Texas A&M University-Commerce Gee Library- Room 132 Phone (903) 886-5150 or (903) 886-5835 Fax (903) 468-8148 Email: <u>Rebecca.Tuerk@tamuc.edu</u> Website: <u>Office of Student Disability Resources and Services</u> <u>http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServ</u> <u>ices/</u>

### Nondiscrimination Notice

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

### **Campus Concealed Carry Statement**

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the <u>Carrying Concealed Handguns On Campus</u> document and/or consult your event organizer.

Web url:

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

# **COURSE OUTLINE / CALENDAR**

Week Monday Date	Content	Reading Assignments	Class Meetings/ Class Assignments/Exams
1 8/29	Orientation to Course		8/31 10-1200
2 9/5	Patho-The Cell	H&M Ch. 1 pgs. 1-14 Ch. 2 pgs. 42-49 Ch. 4 all	9/6 10-1200
3 9/12	Pharm- Introduction to Pharm	Kee Chapters 1, 4, & 8	9/13 10-1200
4 9/19	Patho- Mechanisms of Self-Defense	H&M Ch. 6, 7, & 9 all Ch. 8 199-213 Website on eCollege	9/19 Exam #1 0730-0830 9/20 10-1200
5 9/26	Pharm- Antimicrobials	Kee Chapters 29-34	9/27 10-1200
6 10/3	Patho- Pulmonary	H&M Ch. 27 all Ch. 28 715-717; 721- 722; 725-726	10/3 Exam #2 0830-0930 10/4 10-1200
7 10/10	Pharm- Respiratory Drugs	Kee Chapters 40 & 41	10/11 10-1200
8 10/17	Patho- Cardiovascular	H&M Ch. 24 & 25 all Website on eCollege	10/17 Exam #3 0730-0830 10/18 10-1200
9 10/24	Pharm-Cardiac Medication	Kee Chapters 42-46	10/25 10-1200
10 10/31	Patho- Digestive	H&M Ch. 36 911-918; 920- 923; 931-937 Ch. 37 950-952; 954- 959 Website on eCollege	10/31 Exam #4 0730-0830 11/1 10-1200
11 11/7	Pharm-GI Agents	Kee Chapters 47-48	11/8 10-1200
12 11/14	Patho-Pain	H&M Ch. 14 336-342 Website on eCollege	11/14 Exam #5 0730-0830 11/15 10-1200
13 11/21	Pharm-Pain & Inflammatory Agents	Kee Chapters 25 & 26	11/22 10-1200

14	Patho-	H&M	11/28 Exam #6 0730-0830
11/28	Endocrine	Ch. 19 460-469, 471-	11/29 10-1200
		477, 482-485	
		Websites on eCollege	
15	Pharm-	Kee Chapters 51 & 52	12/6 10-1200
12/5	Endocrine		
	Agents		
16	Finals Week		12/12 Exam #7 ?Time
12/12			

#### Pathophysiology/Pharmacology Paper

For the pathophysiology of your assigned disease (see eCollege), in a narrative format, discuss the pathophysiology of the disease, the risk factors, the causative factors, and the common manifestations. For the pharmacology of your assigned medication, in a narrative format, discuss the action of the drug class, how it relates to your assigned disease, common dosages, and the usual route of medication, adverse effects, and the nursing considerations. The paper is in APA format and should be 3-4 pages long not including the title page and reference page (a title page and reference page are required).

#### **Paper Rubric**

Criteria	Possible Points	Earned Points	Comments:
<ol> <li>Organized written presentation</li> <li>All required questions answered</li> </ol>	50		
3. Paper is appropriate pages in length (not including title page and reference page, if required)	20		
4. References included both in-text and reference page; title page; APA format	30		
Total	100		

#### Topic:

Student:

#### Faculty: