

NURS 3316.01B: Pathophysiology/Pharmacology Syllabus: Fall 2018

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## **COURSE INFORMATION**

# Materials- Textbooks, Readings, Supplementary Readings: Textbook(s) Required:

Gahart, B. & Nazareno, A. R. (2019) *2019 Intravenous medications: A handbook for nurses and health professionals* (35<sup>th</sup> ed) Elsevier: St Louis: Mosby ISBN: 978-0323612722.

Lewis, S.L., Bucher, L., Heitkemper, M. M., & Harding, M. M. (2017) *Medical surgical nursing.* (10<sup>th</sup> ed). St. Louis: Elsevier. ISBN: 978-0323328524.

McCuistion, L.E., Vuljoin-DiMaggio, K, Winton, M.B. and Yeager, J.J. (2017) *Pharmacology: A patient centered nursing process approach.* (9<sup>th</sup> ed.) St. Louis: Saunders Elsevier. ISBN: 978-0323399166.

Skidmore-Roth, L. (2018) Mosby's nursing drug reference. St. Louis: Mosby ISBN: 978-0323531924.

# **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 through the use of the nursing process. Nursing implications relative to the utilization of drug therapy are examined.

## **Student Learning Outcomes:**

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, using presentation and graphics programs

## **Instructional Methods**

This course consists of a series of activities and assessments to assist you in achieving the outcomes/objectives for the course. Each week you will complete various combinations of online assignments, activities, readings, etc. Instructional Strategies that may be used include: lecture, discussion, demonstration, media resources (YouTube and others), role playing, simulation, team-based learning strategies, audio-visual aids, computer assisted instruction, study and practice groups, case study, clinical assignments and supervision, post clinical conferences, Critical Thinking Tool on assigned patients, practice and return demonstration in campus laboratory.

## Student Responsibilities or Tips for Success in the Course

#### **Nursing Student Guide**

The student is responsible for reviewing and understanding the policies and procedures in the BSN Student Guide.

Specific information for the nursing student regarding the nursing program and current policies and procedures can be found here:

## http://www.tamuc.edu/academics/colleges/educationHumanServices/departments/nursing/Current%20Stude nts/studentguidebook/default.aspx

Students are expected to log in to the course on D2L at least every 48 hours for new announcements. This course meets for class every other Tuesday and lab or clinical weekly. It is also recommended that students spend at least 12 hours per week (or longer) in study time for this course. Students are expected to complete assigned readings and other assignments as indicated on D2L and in the syllabus prior to class, lab, and clinical. Students will not be successful in this course without this preparation and additional time spent studying content materials. Students are expected to come prepared to class, simulation, lab, and clinical and all assigned experiences in order to be successful in this course. Lack of preparation is grounds for sending the student home.

## **DRUG CARD ASSIGNMENT/PATHO PRE-WORK**

**Admission to Class:** students will be required to 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 remain in the class that day.

## **PATHOPHYSIOLOGY MAPS (3)**

Students will complete three pathophysiology concept maps over assigned diseases. The content will include pathophysiology, risk factors, causative factors, common manifestations for the disease, nursing interventions, medical treatment, and complications of the disease. Include information that affects the psychosocial aspect of the patient's life. Also include information that is important to teach patients and families of patients with the disease. Use APA format. Submit the patho map and the self-graded grading rubric as one document to the Assignment Submission folder in D2L.

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

Grades will be determined as follows:

Exams 7 (13%)	91%
Pathophysiology Maps (3)	9%
Total	100%

## Grading Scale:

A = 90-100 B = 80-89 C = 75-79 D = 67-74 F = 66 and Below Late Submission

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**

## **Browser support**

D2L is committed to performing key application testing when new browser versions are released. New and updated functionality is also tested against the latest version of supported browsers. However, due to the frequency of some browser releases, D2L cannot guarantee that each browser version will perform as expected. If you encounter any issues with any of the browser versions listed in the tables below, contact D2L Support, who will determine the best course of action for resolution. Reported issues are prioritized by supported browsers and then maintenance browsers.

Supported browsers are the latest or most recent browser versions that are tested against new versions of D2L products. Customers can report problems and receive support for issues. For an optimal experience, D2L recommends using supported browsers with D2L products.

Maintenance browsers are older browser versions that are not tested extensively against new versions of D2L products. Customers can still report problems and receive support for critical issues; however, D2L does not guarantee all issues will be addressed. A maintenance browser becomes officially unsupported after one year.

Note the following:

- Ensure that your browser has JavaScript and Cookies enabled.
- For desktop systems, you must have Adobe Flash Player 10.1 or greater.
- The Brightspace Support features are now optimized for production environments when using the Google Chrome browser, Apple Safari browser, Microsoft Edge browser, Microsoft Internet Explorer browser, and Mozilla Firefox browsers.

Browser	Supported Browser Version(s)	Maintenance Browser Version(s)
Microsoft <sup>®</sup> Edge	Latest	N/A
Microsoft <sup>®</sup> Internet Explorer <sup>®</sup>	N/A	11
Mozilla <sup>®</sup> Firefox <sup>®</sup>	Latest, ESR	N/A
Google <sup>®</sup> Chrome™	Latest	N/A
Apple <sup>®</sup> Safari <sup>®</sup>	Latest	N/A

#### **Desktop Support**

#### Tablet and Mobile Support

Device	Operating System	Browser	Supported Browser Version(s)
Android™	Android 4.4+	Chrome	Latest
Apple	iOS®	Safari, Chrome	The current major version of iOS (the latest minor or <b>point</b> release of that major version) and the previous major version of iOS (the latest minor or <b>point</b> release of that major version). For example, as of June 7, 2017, D2Lsupports iOS 10.3.2 and iOS 9.3.5, but not iOS 10.2.1, 9.0.2, or any other version.

Device	Operating System	Browser	Supported Browser Version(s)
			iOS browser.
Windows	Windows 10	Edge, Chrome, Firefox	Latest of all browsers, and Firefox ESR.

- You will need regular access to a computer with a broadband Internet connection. The minimum computer requirements are:
  - o 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:
  - o 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 http://www.java.com/en/download/manual.jsp</u>
- Current anti-virus software must be installed and kept up to date.

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) https://get.adobe.com/flashplayer/
  - o <u>Adobe Shockwave Player</u> <u>https://get.adobe.com/shockwave/</u>
  - o Apple Quick Time http://www.apple.com/quicktime/download/
- 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.

# ACCESS AND NAVIGATION

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or <u>helpdesk@tamuc.edu</u>.

**Note:** Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a TAMUC campus open computer lab, etc.

# COMMUNICATION AND SUPPORT Brightspace Support Need Help?

# Student Support

If you have any questions or are having difficulties with the course material, please contact your Instructor.

# **Technical Support**

LiveCha

Live Chat or

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778 or click on the click on the words "click here" to submit an issue via email.

# System Maintenance

Please note that on the 4th Sunday of each month there will be System Maintenance which means the system will not be available 12 pm-6 am CST.

## Interaction with Instructor Statement

Communication between faculty and students is important and taken seriously. Preferred communication methods are through individualized faculty office hours, email, or 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. 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.

# COURSE AND UNIVERSITY PROCEDURES/POLICIES

# Course Specific Procedures 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 will result in the student receiving a zero for the missed exam or quiz.
- 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 will 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>.

http://www.tamuc.edu/admissions/registrar/documents/studentGuidebook.pdf

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

## Student Conduct Code – Refer to the BSN Student Guide

Students must adhere to standards of professional and academic conduct. Academic misconduct involves any activity that tends to compromise the academic integrity of the University, or subvert the educational process, including, but not limited to, cheating, plagiarism, falsifying academic records, misrepresenting facts and any act designed to give unfair academic advantage to the student or the attempt to commit such an act. Students are responsible for their own academic honesty and for reporting violations of academic honesty by others.

# TAMUC Attendance

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

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

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/acade mic/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/gradua te/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 <u>StudentDisabilityServices@tamuc.edu</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/34SafetyOfEmploy eesAndStudents/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 Texts: Lewis, Bucher, Heitkamper, & Harding. *Medical surgical nursing* (omit all Nursing Management sections) McCuistion et al. *Pharmacology: A patient-centered nursing process approach* 

Week	Content	Reading Assignments	Exam Times
Date			
1	Orientation to Course		
8/27			
2	Patho-Genetics	Lewis, et al-Ch. 12	
9/4			
3	Pharm-Introduction to	McCuistion- Chapters 1, 2, & 6	

9/11	Pharm		
4	Patho-Mechanisms of	Lewis, et al -Ch.11 (pp 160-163); 13	Exam #1 10-11
9/18	Self-Defense	(pp 191-205); 14 (pp 213-218)	
5	Pharm-Antimicrobials	McCuistion- Chapters 26-28	
9/25			
6	Patho-Pulmonary	Lewis, et al -Ch. 26 (pp 477-486); 27	Exam #2 10-11
10/2		(pp 499-512;519-21, 527-33); Ch. 28	
		all <b>Patho map over Bacterial</b>	
		Pneumonia due by 5PM on 10-1-	
		18 to Assignment Submission	
		folder	
7	Pharm-Respiratory	McCuistion Chapters 35 & 36	
10/9	Drugs		
8	Patho-Cardiovascular	Lewis, et al -Ch. 32-34, 36, 37	Exam #3 10-11
10/16		Website on eCollege	
		Patho map over Heart Failure due	
		by 5PM on 10-15-18 to Assignment	
		Submission folder	
9	Pharm-Cardiac	McCuistion Chapters 37-41	
10/23	Medication		
10	Patho-Digestive	Lewis, et al -Ch. 41 (pp 893-907,	Exam #4 10-11
10/30		909-23), 42 (pp 929-958, 963-972),	
		43 (pp 974-81, 986-993, 999-1011)	
		Website on eCollege	
11	Pharm-GI Agents	McCuistion Chapters 42-43	
11/6			
12	Patho-Pain	Lewis, et al -Ch. 8	Exam #5 10-11
11/13		Website on eCollege	
13	Pharm-Pain &	McCuistion Chapters 24, 25	
11/20	Inflammatory Agents		

14	Patho-Endocrine	Lewis, et al - Ch. 48, 49	Exam #6 10-11
11/27		Websites on eCollege	
		Patho map over Diabetes Mellitus,	
		type 2 due by 5PM on 11-26-18 to	
		Assignment Submission folder	
15	Pharm-Endocrine Agents	McCuistion Chapters 46 & 47	
12/4			
16	Finals Week		Exam #7 10-11
12/10			