

NURS 3316.01B: Pathophysiology/Pharmacology Syllabus: Fall 2020

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Preferred Form of Communication: Email

Communication Response Time: 2 business days

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Preferred Form of Communication: Email

Communication Response Time: 2 business days

COURSE INFORMATION

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

Lewis, S.L., Bucher, L., Heitkemper, M. M., & Harding, M. M. (2017) *Medical surgical nursing*. (11th ed.).

St. Louis: Elsevier. ISBN: 978-0-323-55149-6.

Vallerand, A.H., & Sanoski, C. A. (2019). *Davis' drug guide for nurses* (16th ed.). Philadelphia: F. A. Davis.

ISBN: 9780803669451.

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:

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

- 1. Define basic pharmacological terminology (Essentials VII).
- 2. Apply general concepts of pharmacokinetic and pharmacodynamic processes and their application in drug therapy and the nursing process (Essentials I).
- 3. Recognize significant adverse drug reactions, drug-drug, and drug-nutrient interactions (Essentials VII).
- 4. Describe major classifications of drugs used in current treatment of disease (Essentials VII).
- 5. Provide patient teaching regarding drug therapy that reflects rural access, developmental stage, age, culture, and spirituality (Essentials VII).
- 6. Apply principles of normal anatomy and physiology of human body systems to the pathophysiologic processes of common health problems (Essentials I).
- 7. Identify concepts, principles, and responses related to pathophysiologic processes that result in disease (Essentials VII).
- 8. Discuss clinical manifestations of selected disease processes and health problems (Essentials VII).
- 9. Discuss the nurse's role and responsibility for assessment of individuals experiencing health problems that result in pathophysiologic alterations (Essentials VIII).

COURSE REQUIREMENTS

Minimal Technical Skills Needed

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

Instructional Methods

This is a blended course requiring students to complete reading assignments, 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 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, and case study. While the professors will provide guidance and consultation, the student is responsible for identification of learning needs, self-direction, seeking consultation, and demonstration of course objectives.

Student Responsibilities or Tips for Success in the Course

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%20Students/studentguidebook/default.aspx

This course meets for class every Tuesday. It is 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. ATI Testing provides a Pharmacology Made Easy module that all students will access for pharmacology content. Please use the tutoring section for remediation.

GRADING

Final grades in this course will be determined as follows:

Grading Scale:

A = 90-100

B = 80-89

C = 75-79

D = 60-74

F = Below 60

All coursework must be completed/submitted to complete the course.

Assignments	Weight
Exams 7 (13% each)	91%
Pathophysiology Maps-3	3%
(1% each)	
Drug Cards-6 (1% each)	6%
Total	100%

Successful completion of the assignments 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 (patho maps) will not be added to the final grade unless exam grade average is 75% or higher.

ASSESSMENTS

DRUG CARD ASSIGNMENT (6 at 1% each = 6% of course grade)

Admission to Class: students will be required to 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. (Learning Outcomes #2, 3, 4, 5)

PATHOPHYSIOLOGY MAPS (3 at 1% each = 3% of course grade)

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. (Learning Outcomes #6, 7, 8, 9)

EXAMINATIONS (7 at 13% each = 91% of course grade)

There are seven proctored, computer-based examinations in this class. The Course Outline/Calendar identifies each exam's applicable chapters. Exams will cover medical terminology and key content from the identified chapters in the textbooks. Questions will be in multiple formats, which may include multiple choice, multiple answer, matching, short answer, etc. (Learning Outcomes #1-9)

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.

Desktop Support

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

Tablet and Mobile Support

Device	Operating System	Browser	Supported Browser Version(s)
Android™	Android 4.4+	Chrome	Latest

Device	Operating System	Browser	Supported Browser Version(s)
Apple	iOS®	Safari, Chrome	The current major version of iOS (the latest minor or point release of that major version) and the previous major version of iOS (the latest minor or point 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. Chrome: Latest version for the 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
 - o 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: JAVA web site http://www.java.com/en/download/manual.jsp
- 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:

- Adobe Reader https://get.adobe.com/reader/
- o Adobe Flash Player (version 17 or later) https://get.adobe.com/flashplayer/
- Adobe Shockwave Player https://get.adobe.com/shockwave/
- 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 helpdesk@tamuc.edu.

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

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

It is expected that you will check your D2L course and email at least every 48 hours for communication from instructors. A response to any email or message will occur within two (2) business days.

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 assignments will be graded and returned to the student within two (2) weeks of submission.

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.

Late Submission

It is expected that you will submit all assignments on time. If you need an extension, it should be requested before 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 <u>maximum of one document</u> per assignment. Failure to follow these guidelines will result in a grade of "0" on the assignment.

Group Work

All members of the group will receive the same grade on the group work. However, a student can be removed from his/her team if the other students in the group come to the instructor and report that a student is not doing his/her fair share of the work. If that happens, the instructor will notify the student in writing. The student will then be responsible for doing the assignment on their own.

Nursing Student Guide

Specific information for the nursing student regarding the nursing program and current policies and procedures can be found in the BSN Student Guide located here:

http://www.tamuc.edu/academics/colleges/educationHumanServices/departments/nursing/Current%20Students/BSNstudentguidebook/default.aspx

It is the student's responsibility to review and understand the policies and procedures provided in the student guidebook as all students are held to the statutes and policies therein.

Professional Behavioral Standards Policy

The Texas A&M University -Commerce Nursing Department expects all students to act with professionalism and high regard for ethical conduct in all matters. The Professional Behavioral Standards Policy is listed in the BSN Student Guide.

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 Student Guidebook.

http://www.tamuc.edu/student_guidebook/Student_Guidebook.pdf

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

TAMUC Attendance

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

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

 $\frac{http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/graduate/13}{.99.99.R0.10GraduateStudentAcademicDishonesty.pdf}$

Students with Disabilities- ADA Statement

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 162 Phone (903) 886-5150 or (903) 886-5835

Fax (903) 468-8148

Email: studentdisabilityservices@tamuc.edu

Website: Office of Student Disability Resources and Services

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

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:

 $\frac{http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf$

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

Texts: Lewis, Bucher, Heitkamper, & Harding. *Medical surgical nursing* (omit all Nursing Management sections) Pharm: ATI- Pharmacology Made Easy 4.0

Week	Content	Reading Assignments	Exam Times
Date			
1	Orientation to Course		
8/25			
2	Patho-Genetics-online	Lewis,et al-Ch. 12	
9/1	Pharm-Introduction to	ATI- Introduction to Pharmacology	
	Pharm		

3 9/8	Patho-Mechanisms of Self-Defense	Lewis,et al -Ch.11 (pp 156-160); 13 (pp 191-205); 14 (pp 211-216)	Exam #1 11-12
4 9/15	Pharm-Antimicrobials	ATI- Infection	
5 9/22	Patho-Pulmonary	Lewis,et al -Ch. 26 (pp 480-488); 27 (pp 502-510;522-25, 531-34); Ch. 28 all Patho map over Bacterial Pneumonia due by 2359 on 9/23/19 to Assignment Submission folder	Exam #2 11-12
6 9/29	Pharm-Respiratory Drugs	ATI- Respiratory System	
7 10/6	Patho-Cardiovascular	Lewis,et al -Ch. 32 (all), 33 (698-604, 708-709, 717-722), 34 (734-741) 37 (800-805, 813-815, 821-824) Patho map over Heart Failure due by 2359 on 10-7-19 to Assignment Submission folder	Exam #3 11-12
8 10/13	Pharm-Cardiac Medication	ATI- Cardiovascular System	
9 10/20	Patho-Digestive	Lewis,et al -Ch. 41 (pp 889-918, 42 (pp 924-952, 957-965), 43 (pp 968-971, 980-987, 992-1003)	Exam #4 11-12
10 10/27	Pharm-GI Agents	ATI- Gastrointestinal System	
11 11/3	Patho-Pain	Lewis,et al -Ch. 8	Exam #5 11-12
12 11/10	Pharm-Pain & Inflammatory Agents	ATI- Pain and Inflammation	
13 11/17	Patho-Endocrine	Lewis,et al - Ch. 48, 49 Patho map over Diabetes Mellitus, type 2 due by 2359 on 11-18-19 to Assignment Submission folder	Exam #6 11-12
14	Pharm-Endocrine Agents	ATI- Endocrine System	
11/24 15	_		Exam #7 11-12
12/1			
16 12/7	Finals Week		