



NURS 5302.01W Advanced Pathophysiology

Course Syllabus: Fall 2025

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COURSE INFORMATION

Materials – Textbooks, Readings, Supplementary Readings Textbook(s)

Online resources

Required:

Rogers, J. (2024). McCance & Huether *Pathophysiology: The Biologic Basis for disease in adults and children* (9th ed.). St. Louis: Elsevier.

Course Description

This course focuses on pathophysiology and disruptions in normal body functioning for individuals across the lifespan. In depth theoretical and clinical principles of diseases encountered in primary care setting as well as health disparities resulting from genetic, environmental, and stress related causes are included. Assessment findings, diagnostic testing and interventions specific to selected health problems are explored to begin

development of critical thinking skills for pathophysiologic causes and treatments of given disease processes.

Student Learning Outcomes

Upon completion of the course, the student will have been given the opportunity to:

1. Apply principles related to normal anatomy and physiology of human body systems to pathophysiologic processes of common disease processes (AACN Master's Essentials I & IX).
2. Differentiate among normal and abnormal variants of pathophysiologic and physical findings based on lifespan changes and normal anatomy and physiology (AACN Master's Essentials I & IX).
3. Synthesize pathophysiologic knowledge with current aspects of care relating to commonly occurring diseases (AACN Master's Essentials I, IV, VIII & IX).
4. Incorporate current and emerging genetic/genomic evidence in advanced nursing care management plans for individuals, families, and communities (AACN Master's Essentials I, VIII & IX).
5. Discuss clinical manifestations of selected disease processes and health related problems across the life span (AACN Master's Essentials I & IX).
6. Identify appropriate pharmacological and nonpharmacological treatment and management of specific health alterations (AACN Master's Essentials I, VIII & IX).
7. Develop differential medical diagnoses based on analysis of pathophysiological findings (AACN Master's Essentials I, IV & IX).
8. Identify the role of the advanced practice nurse in the development of an evidence-based treatment plan for specific

pathophysiological processes (AACN Master's Essentials I, IV & IX).

COURSE REQUIREMENTS

Minimal Technical Skills Needed

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

Instructional Methods

This is an online course 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 activities, formal, and informal exchange of ideas with classmates and colleagues regarding specific topics as well as utilizing critical thinking skills. Teaching methods include independent study of texts and library resources, computerassisted instruction, audio-visual aids, and the assignments listed. While the professor 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

Online Etiquette: This class will be conducted entirely online. Please use the following a guide to your online behavior.

- Make a personal commitment to learning about, understanding, and supporting your peers.
- Assume the best of others in the class and expect the best from them.
- Recognize and value the experiences, abilities, and knowledge each person brings to class. Value the diversity of the class.
- Participate actively in the discussions, having completed the readings and thought about the issues.

- Pay close attention to what your classmates write in their online comments. Ask clarifying questions, when appropriate. These questions are meant to probe and shed new light, not to minimize or devalue comments.
- Think through and re-read your comments before you post them.
- Never make derogatory comments toward another person in the class.
- Do not make sexist, racist, homophobic, or victim-blaming comments at all.
- Disagree with ideas, but do not make personal attacks.
- Be open to be challenged or confronted on your ideas or prejudices.
- Challenge others with the intent of facilitating growth. Do not demean or embarrass others.
- Encourage others to develop and share their ideas.

GRADING

Final grades in this course will be based on the following

A = 90%-100%

B = 80%-89%

C = 75%-79%

D = 60%-74% F = 59% or Below

Evaluation Methods	
Quiz	30
Exams	300
Final Exam	120
Discussion Board Presentation	50
Total Points	500

Must make an 80 average on exams to pass course.

Late Submissions:

It is expected that you will submit all class assignments on time. If you need an extension, it should be requested before the due date/time and may or may not be approved at the discretion of the professor. 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.

Multiple instances of late clinical assignments will result in receipt of a Student Performance and Behaviors Evaluation Form and, possibly, failure of clinical/course.

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.

Submitting assignments: Upload all completed assignments to the appropriate area in D2L. Before uploading any assignment, name the file with the course number, your name, last, first, the assignment or document name submitted. Preceptor agreements for example would be- 5622 Callicoat, Donna, Preceptor Agreement Hanko.

Assignments

Quizzes: Quizzes will be an online, timed assessment of the current assigned reading materials. Quizzes not completed during the assigned timeframe will not have make-ups and the student will receive a zero for the quiz (Learning outcomes #1-#8).

Exams: Exams will be an online, timed assessment of the units specified in the course schedule. A student who is unable to take the scheduled exam must notify the instructor prior to the start of the exam to determine whether a make-up is available (Learning outcomes #1-#8). **Final Exam will be proctored** -bring your lap top.

Discussion Board Presentation: Each student will prepare a presentation on a specific disease process assigned week 1 by the

instructor. This presentation will be placed into the online course for asynchronous access by the class (Learning outcomes #1-#8).

Subsequent posts, including substantive responses to peer(s) and faculty questions. A total of 3 substantive posts are required.

A 10% late penalty will be imposed for initial discussions posted after the deadline on Wednesday 2300.

A 10% penalty will be imposed for not entering the minimum number of interactive dialogue posts (3) NOTHING will be accepted after 2300 Saturday.

Total Points Possible: 50

Requirements

Create a presentation on an assigned health condition from the instructor.

1. Provide a description of the disease .
2. Provide the criteria for diagnosis.
3. Review common diagnostic tests required for diagnosis and/or ongoing management.
4. Present a pharmacologic treatment algorithm that includes the most commonly prescribed drugs for the condition.
5. Provide evidence by sharing clinical guidelines, research articles, or other scholarly materials to support your Infographic
6. Identify reasons that each medication might be selected, barriers to practice, or issues related to the condition and the use of pharmacologic treatment.
7. Describe the expected outcomes for medication management, including expectations for follow up care.
8. A full reference list should be included in **APA** format on a reference page. APA format required and points will be deducted for errors.

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.

TECHNOLOGY REQUIREMENTS

LMS

All course sections offered by Texas A&M University-Commerce have a corresponding course shell in the myLeo Online Learning Management System (LMS). Below are technical requirements

LMS Requirements:

<https://community.brightspace.com/s/article/Brightspace-Platform-Requirements> LMS Browser Support:

https://documentation.brightspace.com/EN/brightspace/requirements/all/browser_support.htm

YouSeeU Virtual Classroom Requirements:

<https://support.youseeu.com/hc/en-us/articles/115007031107-Basic-SystemRequirements>

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

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. Other support options can be found here:

<https://community.brightspace.com/support/s/contactsupport>

Interaction with Instructor Statement

It is expected that you will check your D2L course and email **DAILY, (Sundays exempt)** for communication from the instructor.

Communication between faculty and students is paramount. Preferred communication method is email. Students may text if an immediate issue arises. Phone conferences and meeting times can be arranged.

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

Nursing Student Guide

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

<https://www.tamuc.edu/academics/colleges/educationHumanServices/departments/nursing/documents/MSN%20Student%20Guide%202019.pdf>

COURSE AND UNIVERSITY PROCEDURES/POLICIES

University Specific Procedures/Policies

Students should not attend class when ill or after exposure to anyone with a communicable illness. Communicate such instances directly with your instructor. Faculty will work to support the student getting access to missed content or completing missed assignments.

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/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx>

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum:

<https://www.britannica.com/topic/netiquette>

TAMUC Attendance

For more information about the attendance policy please visit the [Attendance](#) 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](#)

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

In any case, students are fully responsible for the content of any assignment they submit, regardless of whether they used an AI, in any way. This specifically includes cases in which the AI plagiarized another text or misrepresented sources.

AI Use Policy

Texas A&M University-Commerce acknowledges that there are legitimate uses of Artificial Intelligence, ChatBots, or other software that has the

capacity to generate text, or suggest replacements for text beyond individual words, as determined by the instructor of the course.

Any use of such software must be documented. Any undocumented use of such software constitutes an instance of academic dishonesty (plagiarism).

Individual instructors may disallow entirely the use of such software for individual assignments or for the entire course. Students should be aware of such requirements and follow their instructors' guidelines. If no instructions are provided the student should assume that the use of such software is disallowed.

In any case, students are fully responsible for the content of any assignment they submit, regardless of whether they used an AI, in any way. This specifically includes cases in which the AI plagiarized another text or misrepresented sources.

13.99.99.R0.03 Undergraduate Academic Dishonesty

13.99.99.R0.10 Graduate Student Academic Dishonesty

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/)

[http://www.tamuc.edu/campusLife/campusServices/
studentDisabilityResourcesAndServices/](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 [Carrying Concealed Handguns On Campus](#) 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 SPECIFIC PROCEDURES/POLICIES

CLASS :

1. Exam dates are listed in each course syllabus, and the student is expected to be present online for exams. In the event that the student will be absent, the 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 MSN Student Guide for the exam absence process.

COURSE OUTLINE / CALENDAR

Week	Date	Content	Readings
1	8/28	Orientation via Zoom 8/28 at 11:30am-12:30am Clinical Reasoning Cellular biology, Altered cellular and tissue biology, Cellular environment	McCance: Chapter 1,2 Summaries *Chapter 3
2	9/4	Genes, Gene-Environment Interaction, Epigenetics	McCance: Chapter 4-6 Summaries
3	9/11	Mechanisms of Self- Defense Immunity Infection Stress and Disease Quiz 9/11 0900 online	McCance: Chapters 7- 10 Chapter Summary 11
4	9/18	Cellular Proliferation: Cancer Laboratory Interpretation and Diagnostic Imaging Discussion Board Presentations – Post by 9/18	McCance: Chapter 12-14 Summaries

5	9/25	Pathophysiologic Alterations of the neurologic system	McCance: Chapter Summaries 15-16 Chapter 17-20
6	10/2	Pathophysiologic Alterations of the Endocrine System	McCance: Chapter summaries 21-23 Chapter 22 * DM and Thyroid*

7	10/9	Pathophysiologic Alterations of the Reproductive System EXAM 1----10/09 0900 online .	McCance: Chapter summary 24. Chapters 25-27
8	10/16	Pathophysiologic Alterations of the Hematologic System	McCance: Chapter summaries 28 & 30 Chapters 29-31..* Anemias*
9	10/23	Pathophysiologic Alterations of the Cardiovascular and lymphatic systems	McCance: Chapter summary 32 Chapters 33-34 JNC Guidelines *HTN

10	10/30	Pathophysiologic Alterations of the Pulmonary System Exam 2--- 10/30 at 0900 online	McCance: Chapter summary 35 Chapters 36-37
11	11/6	Pathophysiologic Alterations of the Renal and Urologic Systems	McCance: Chapter summary 38 Chapters 39-40. .
12	11/13	Pathophysiologic Alterations of the Digestive System	McCance: Chapter summary 41 Chapters 42-43
13	11/20	Pathophysiologic Alterations of the Musculoskeletal System Multiple Interacting Systems and Burns Exam 3----11/20 at 0900 online	McCance: Chapter summary 44 Chapters 45-46. Chapter summaries 49-50
14	11/27	The Integumentary System Happy Thanksgiving!	McCance: Chapters 47-48.
15	12/4	Final Review – Top 25 Diagnosis *Evidence-Based Practice Use of Guidelines and Algorithms	🔍 Practice questions with group

16	12/11	0900 am Comprehensive FINAL EXAM ---1 hour, 75 questions	
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Presentation: Grading Criteria

Criteria	Possible Points	Score	Comments
Introduction of Disease	5		
Pathophysiology and clinical manifestations of the disease process across the lifespan	10		

Prevention of disease and screening	5		
Laboratory and diagnostic studies used in the identification and diagnosis of the problem	5		
Management and treatment, including pharmacological and non-pharmacological treatments, cultural and socio-cultural considerations, prognosis and expected health outcomes.	10		
Response to others presentations	10		
Literature review includes clinical guidelines, research	5		

based, peer- reviewed journal articles no older than 5 years APA format and grammar and spelling	Points deducted for errors>1		
TOTAL	50		