



## **NURS 5302.01W Advanced Pathophysiology**

Course Syllabus: Fall 2020

Faculty: Kamala D. Fields, MSN, RN, FNP, PMHNP–BC (Course Coordinator)  
Office Location: NHS Room 224  
Office Hours: by appointment  
Office Phone: 903-886-5315  
Office Fax: 903-886-5729  
University Email Address: kamala.fields@tamuc.edu

Faculty: Monica Tenhunen, DNP, RN, GNP-BC  
Office Location: NHS Room 233  
Office Hours: as posted  
Office Phone: 903-886-5315  
Office Fax: 903-886-5729  
University Email Address: monica.tenhunen@tamuc.edu

Faculty: Philomena Mistretta, DNP, RN, FNP-C  
Office Location: NHS Room 224  
Office Hours: as posted  
Office Phone: 903-886-5315  
Office Fax: 903-886-5729  
University Email Address: philomena.mistretta@tamuc.edu

### **COURSE INFORMATION**

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

Required

McCance, K., & Huether, S. (2018). *Pathophysiology: The Biologic Basis for disease in adults and children* (8th ed.). St. Louis: Elsevier.

Dains, J. Baumann, & Scheibel, P. (2015). *Advanced health assessment & clinical diagnosis in primary care* (5th ed.). St. Louis: Mosby.

Optional

Collins, R. (2017). *Algorithmic diagnosis of symptoms and signs* (4th ed.). Philadelphia: Lippincott, Williams & Wilkins.

### **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 non-pharmacological 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, computer-assisted 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.
- Be willing to change.

## 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

<b>Evaluation Methods</b>	
Quizzes (10)	10%
Mid-term Exam	20%
Final Exam	25%
Case Study Presentation	20%
Scholarly Paper	25%

### **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 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.

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.

## **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).

**Case Study Presentation:** Each student will prepare a 20-25 minute case study presentation on a specific disease process being covered during the week the individual case study is assigned. This case study will be placed into the online course for asynchronous access by the class (Learning outcomes #1-#8).

Both the class members and the instructor will evaluate presentations.

Presentations should include:

- Comprehensive description of the chief complaint with presenting signs and symptoms.
- Pathophysiology and clinical manifestations related to the disease process and how it presents across the lifespan.
- Laboratory and diagnostic studies used in identification and diagnosis of the problem.
- Management and treatment to include pharmacological and

- non- pharmacological treatments.
- Cultural and socio-cultural considerations.
- Prognosis and expected health outcomes.

**Scholarly Paper:** Students will be expected to write a scholarly paper approximately 5-7 pages in length (not including title page and references). The paper should be well-organized using specific headings, proper grammar, syntax and terminology. Correct APA format is required. A list of acceptable topics is found at the end of the syllabus (Learning outcomes #1-#8). The paper should include:

- Brief introduction of the disease process and the significance of the problem as related across the lifespan.
- Pathophysiology of the disease process and history and physical findings related to the disease.
- Incidence and prevalence of disease.
- Review of current evidence-based treatment guidelines related to research findings specific to the disease process. Student must use at least five (5) peer-reviewed research articles from journal sources that are less than five years old.
- Role of the APN and the use of pharmacological and non-pharmacological treatments specific to the patient's condition.
- Cultural and socio-cultural considerations.
- Prognosis and long-term care considerations.

### **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](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-System-Requirements>

## **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](mailto: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 at least **DAILY** for communication from the instructor.

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.

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**

**A&M-Commerce requires the use of face-coverings in all instructional and research classrooms/laboratories. Exceptions may be made by faculty where warranted. Faculty have management over their classrooms. Students not using face-coverings can be required to leave class. Repetitive refusal to comply can be reported to the Office of Students' Rights and Responsibilities as a violation of the student Code of Conduct.**

**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>

### **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](mailto: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 [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 course coordinator 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	8/24/20	Clinical Reasoning Cellular biology, Altered cellular and tissue biology, Cellular environment	McCance: Chap 1,-3 Dains: Chap 1
2	8/31/20	Genes, Gene-Environment Interaction, Epigenetics <b>Quiz 1 due by 9/3/20 at 11:00 PM</b>	McCance: Chap 4-6
3	9/7/20	Mechanisms of Self-Defense Immunity Infection Stress and Disease <b>Quiz 2 due by 9/10/20 at 11:00 PM</b> <b>Notify faculty of topic for Case Study</b>	McCance: Chap 7- 11
4	9/14/20	Cellular Proliferation: Cancer Laboratory Interpretation and Diagnostic Imaging <b>Quiz 3 due by 9/17/20 at 11:00 PM</b>	McCance: Chap 12-14 Dains: Chap 6, 40, 41
5	9/21/20	Pathophysiologic Alterations of the neurologic system <b>Case Study</b> <b>Presentation due 9/24/20 at 11:00 PM</b>	McCance: Chap 15-20 Dains, Chap 4, 9, 19
6	9/28/20	Pathophysiologic Alterations of the Endocrine System <b>Quiz 4 due by 10/1/20 at 11:00 PM</b>	McCance: Chap 21-23 Dains: none

7	<b>10/5/20</b>	<b>Mid Term Exam</b>	
8	10/12/20	Pathophysiologic Alterations of the Reproductive System <b>Quiz 5 due by 10/8/19 at 11:00 PM</b>	McCance: Chap 24-27. Dains: Chap 5, 27, 36, & 37
9	10/19/20	Pathophysiologic Alterations of the Hematologic System <b>Quiz 6 due by 10/15/20 at 11:00 PM</b>	McCance: Chap 28-31.
10	10/26/20	Pathophysiologic Alterations of the Cardiovascular and lymphatic systems <b>Quiz 7 due by 10/22/20 at 11:00 PM</b>	McCance: Chap 32-34 Dains: Chap 8,26, 33 JNC Guidelines
11	11/2/20	Pathophysiologic Alterations of the Pulmonary System <b>Quiz 8 due by 10/29/20 at 11:00 PM</b>	McCance: Chap 35-37 Dains:11, 14, 25
12	11/9/20	Pathophysiologic Alterations of the Renal and Urologic Systems <b>Scholarly Paper Due 11/12/20 at 11:00 PM</b>	McCance: Chap 38-40. Dains: Chap 18, 34, 35.
13	11/16/20	Pathophysiologic Alterations of the Digestive System <b>Quiz 9 due by 11/19/20 at 11:00 PM</b>	McCance: Chap 41-43 Dains: Chap 3, 10, 12, 20, 29, 39.
14	11/23/20	Pathophysiologic Alterations of the Musculoskeletal System and the Integumentary System <b>Happy Thanksgiving!</b>	McCance: Chap 44-48. Dains: Chap 22, 23, 24, 28.

15	11/30/20	Multiple Interacting Systems Evidence-Based Practice Use of Algorithms <b>Quiz 10 due by 12/3/19 at 11:00 PM</b>	McCance: Chap 49 & 50.
16	<b>12/7/19</b>	<b>Final Exam</b>	

### Case Study Presentation: Grading Criteria

Criteria	Possible Points	Score	Comments
Introduction of chief complaint and disease process with the associated signs and symptoms	10		
Five (5) potential differential diagnoses, in order of priority, related to the chief complaint	20		
Pathophysiology and clinical manifestations of the disease process across the lifespan	30		
Laboratory and diagnostic studies used in the identification and diagnosis of the problem	10		
Management and treatment, including pharmacological and non-pharmacological treatments, cultural and socio-cultural considerations, prognosis and expected health outcomes.	10		
Teaching and anticipatory guidance	5		
PowerPoint Presentation:			
a. Organization, grammar & terminology,	5		
b. Proper APA citation of sources and reference page	5		
c. Professional presentation	5		
d. Within time limitation (15-20 min)			
<b>TOTAL</b>	<b>100</b>		

**Scholarly Paper Disease topics include the following**

1. Asthma
2. Cerebrovascular Accident (CVA)
3. Uveitis
4. Syncope
5. Tachycardia
6. Cellulitis
7. Herpes Zoster
8. Steven-Johnson Syndrome
9. Urticaria
10. Acute Otitis Media
11. Coronary Artery Disease
12. Acute Myocardial Infarction (MI)
13. Heart Failure
14. Hypertension
15. Hyperthyroidism
16. Deep Vein Thrombosis (DVT)
17. Diabetes Mellitus Type 2
18. Metabolic Syndrome
19. Non-Alcoholic Steatohepatitis
20. diverticulosis
21. Gastroesophageal Reflux (GERD)
22. Barrett's Esophagus
23. Inflammatory Bowel Disease (IBS)
24. Physiological Jaundice in Infants
25. Pelvic Inflammatory Disease
26. Hematuria
27. Nephrolithiasis
28. Lyme Disease
29. Rheumatoid Arthritis
30. Rocky Mountain Spotted Fever



### Scholarly Paper: Grading Criteria

	<b>Points Possible</b>	<b>Score</b>	<b>Comments</b>
Introduction and description of disease process.	5		
Significance of the problem across the lifespan	10		
Pathophysiology of the disease and related history and physical findings specific to the disease process.	20		
Statistical information on the incidence and prevalence of the disease.	10		
Literature review related to current research and evidence-based treatments specific to the disease process.	10		
Literature review includes 5 research based, peer- reviewed journal articles no older than 5 years	5		
APN role in management and treatment to include pharmacological and non-pharmacological treatments	15		
Cultural and socio-cultural considerations as they relate to patients prognosis and long-term outcomes.	10		
Organization	5		
Correct APA format	5		
Correct terminology, grammar	5		
<b>TOTAL</b>			