$\begin{array}{c} \text{McLennan} \\ \hline C O L L E G E \end{array}$

WACO, TEXAS

COURSE SYLLABUS

AND

INSTRUCTOR PLAN

PATHOPHYSIOLOGY

PTHA 1321 01

Heather Davis, PT, MS

NOTE: This is a 16-week course

COVID 19 Notice:

McLennan Community College is committed to providing you with every resource you need to reach your academic goals including your safety. We will continue to monitor the evolving situation with COVID 19 and adjust our safety guidelines to make sure we offer a safe environment for you and our faculty. Please make sure to consult your faculty and the MCC website at https://www.mclennan.edu/crisis-management/coronavirus-updates/index.html on any changes to these guidelines.

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Course Description:

Studies the pathogenesis, prognosis, and therapeutic management of disease/conditions commonly encountered in physical therapy. Semester Hours 3 (3 lec)

Prerequisites:

Successful completion of all courses in Semester 1 of the PTA program

Course Notes and Instructor Recommendations:

Review techniques for taking vital signs, normal and abnormal vital sign readings, and critical values for safe exercise from PTHA 1409 Intro to PT.

Instructor Information:

Instructor Name: Heather Davis PT, MS MCC E-mail: hdavis@mclennan.edu Office Phone Number: 254-299-8715 Office Location: CSC C200 Office/Teacher Conference Hours: M/W 10:00- 12:00 and by appointment

Required Text & Materials:

Title: Pathology for the Physical Therapist Assistant Author: Goodman & Fuller Edition: latest edition Publisher: W. B. Saunders Company ISBN: 978-1-4377-0894-3

Title: Pharmacology in Rehabilitation Author: Ciccone Edition: Latest edition Publisher: F.A.Davis ISBN: 978-0-8036-1377-6

MCC Bookstore website: http://www.mclennan.edu/bookstore/

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Methods of Teaching and Learning:

Teaching methods for this course include lecture, open classroom discussion and debate, learning assignments and evidence-based inquiry on pathological conditions and the relationship to PT intervention. There will be exams and quizzes throughout the course.

Course Objectives and/or Competencies:

The student will be able to:

- 1. Identify and explain the pathogenesis of selected diseases/conditions relevant to physical therapy
- 2. Identify common medical/surgical interventions for selected diseases/conditions
- 3. Discuss common diagnostic tests and procedures including, but not limited to: MRI, CT, Ultrasound, X-Ray, Blood values, Electrocardiogram, EEG, EMG, Pulse oximetry
- 4. Determine aspects of pathophysiology that affect physical therapy treatment
- 5. Analyze and describe responses to acute physiological change in patient conditions
- 6. Be able to recognize and assess changes in patient status that indicate an emergent condition and take appropriate action
- 7. Describe how to obtain and assess pertinent pharmacological information
- 8. Analyze and predict the impact of pertinent pharmacological information (e.g. side effects) on patient care

Date	Торіс
T Jan 10	Intro Concepts Pathophysiology
	Pain
Th Jan 12	Pain
	Pharmacology overview
T Jan 17	Pharmacology overview
	Blood Review
Th Jan 19	Inflammation
T Jan 24	Inflammation
	Immunology
Th Jan 26	Immunology
	Inflammation & Immune Pharm
T Jan 31	Hematology

Course outline and Schedule:

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Th Feb 2	Hematology
T Feb 7	Infectious Diseases
Th Feb 9	Infectious Diseases
	Heme & ID Pharm
T Feb 14	EXAMI
Th Feb 16	Endocrine/Metabolic
T Feb 21	Endocrine/Metabolic
Th Feb 23	GI
T Feb 28	Hepatic/Biliary
Th Mar 2	Nephrology
	Endo/GI/Liver& Kidney Pharm
T Mar 7	Spring Break
Th Mar 9	Spring Break
T Mar 14	Integumentary
Th Mar 16	Oncology
T Mar 21	Oncology
	Integ & Oncology Pharm
Th Mar 23	EXAM II
T Mar 28	Catch UP
Th Mar 30	Cardiovascular
T Apr 4	Cardiovascular
Th Apr 6	Pulmonary
T Apr 11	Pulmonary
Th Apr 13	Pulmonary
	Cardiopulm Pharm
T Apr 18	EXAM III

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Th May 4	FINAL EXAM
T May 2	No Class
	CNS & PNS Pharm
Th APR 27	PNS
T Apr 25	CNS & PNS
Th Apr 20	CNS

Course schedule is subject to change. Students will be notified of changes as the earliest possible time. Changes will be announced in class as well as on Brightspace.

*Review of Anatomy and Physiology II information will be extremely helpful for successful completion of this course.

Course Grading Information:

TOTAL	100%
Quizzes	20%
Final Exam	20%
Exam 3	15%
Exam 2	15%
Exam 1	15%

Grades will not be rounded for this course

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Grade distribution for the course is as follows:
90% and above ......A
80%- 89.99% ......B
75%- 79.99% ......C
60%- 74.99% .....D
Below 60% ......F
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A student must achieve a <u>minimum combined average of 75% on all course work</u> (written exams, quizzes, assignments, as applicable) to make a passing grade of C or better for the course. Any student making a D or lower in the course will not be able to continue in the program; however, may be eligible to re-apply for the next cohort dependent upon overall status. See PTA student handbook for details.

Course Outline

I. Basic Concepts of the Disease Process

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- A. Intro to Pathophysiology
- B. Inflammation and Healing
- C. Immunity and Abnormal Responses
- D. Hematology
- II. Basic Pharmacology
- III. Pathophysiology of
 - A. Infectious Diseases
 - B. Endocrine system
 - C. Digestive system
 - D. Urinary system
 - E. Integumentary system
 - F. Neoplasms/Oncology
 - G. Cardiovascular system
 - H. Respiratory system
 - I. Neurological system

IV. Effects of Altered Status/Growth and Development of Disease Processes related to the body systems/processes discussed

- A. Congenital and Genetic Disorders
- B. Diseases Associated with Adolescence
- C. The Relationship between Pregnancy and Disease
- D. Aging and the Disease Process
- E. Effects of Immobility
- F. Influence of Stress
- G. Pain
- H. Substance Abuse
- I. Environmental Hazards
- J. Fluid, Electrolyte, and Acid-Base Imbalances

Exams:

3 written exams and 1 final exam will be given. Information tested on the written exams is cumulative. Each exam will contain approximately 80% not previously tested information and 20% previously tested information. The final exam is comprehensive and will contain information from the entire semester.

• Students are not allowed to have ANY personal items other than a #2 pencil and a scantron at their desk during exams. Students are also not allowed to wear baseball caps during the exam. Examples of personal items include: backpacks, books, purses, computers, phones, smart watches, food, drinks. If a student has a need for their phone to be on during a test (eg. Sick child), the phone may be placed on vibrate and kept with the instructor during the exam.

Examination Make-Up Policy

If a student has an excused reason for missing a test with appropriate <u>documentation and</u> <u>notifies the instructor prior to the exam</u>, a make-up test may be scheduled. If a student fails to

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notify the instructor and/or does not have an excused reason with supporting documentation for missing the exam, <u>a grade of 0</u> will be assigned for that exam. A student may take only one make-up exam in each course.

Late Work, Attendance, and Make Up Work Policies:

Attendance: Attendance is essential for attainment of course objectives and competencies. A student who is not present at the scheduled start time of class is considered tardy, and three (3) tardies constitute one absence. A student that is more than 30 minutes late to lecture will be considered absent.

Two (2) absences or absence from 2 lec hours:	verbal warning
Three (3) absences or absence from 3 lec hours:	written warning
Four (4) absences or absence from 4 lec hours:	program probation
Five (5) absences or absence from 5 lec hours:	withdrawal from program

Make-up work may be required for absences in order to ensure that students acquire information presented during their absence. <u>Students must notify the instructor in advance</u> whenever tardiness or absence is unavoidable.

Students should not schedule travel events during any class day from the first day of the semester to the last day of finals per the college calendar. Students who plan travel and miss course content or exams will receive a grade of 0 unless *prior* written approval is given by the faculty for an excused reason (ie death in the family, etc.).

It is the *student's* responsibility to attain the information that is missed due to his/her absence.

Student Behavioral Expectations or Conduct Policy:

Student Responsibilities:

To be successful in this course, students should come to class having read the assigned material and having completed the homework assignment, ready to participate in discussion. This will provide a better learning experience for the student. It is also the responsibility of the student to complete assignments on time. Written assignments are due at the beginning of the class period. The appendices in the text offer reference and review of medical terms, abbreviations, and common diagnostic tests. If you are reading and do not know the meaning of a word, be sure to consult these helps and/or a medical dictionary.

Student Behavioral Expectations or Conduct Policy:

Generic Abilities & Professional Behaviors:

Students are expected to maintain a professional classroom decorum that includes respect for other students and the instructor, prompt and regular attendance, and an attitude that seeks to take full advantage of the educational opportunity.

Students in the Physical Therapist Assistant program have willingly applied for and entered into a professional degree program. Implicit in professional degree programs is the need to develop the student's professional behaviors as well as minimum basic entry level competencies. The tool utilized in the PTA Program is the Generic Abilities form. Students will be evaluated on a continual basis throughout the program in classroom, lab activities, clinical activities, and interaction between fellow students, faculty, and instructors. If a student is found to be lacking in any area of the generic abilities, the student will be called in by the faculty member who will fill out the form and review any deficiencies. The faculty member, and if deemed necessary the program director, will then discuss with the student a plan of action to assist the student in development in the areas that have been deemed deficient.

Any student who persists with deficiencies with no improvement in professional behavior over 3 different episodes will be dismissed from the program based upon lack of progress in professional behavior. This policy is effective throughout the entire program across all courses, program related activities and clinical work as professional behavior extends across all aspects of the program.

It will also be at the faculty member's discretion to take 2 points from the student's final grade for each documented episode related to unprofessional behavior.

PHYSICAL THERAPIST ASSISTANT PROGRAM PROFESSIONAL BEHAVIORS (Generic Abilities) FORM

Commitment to learning

1	2	3	4	5	6	7
identifying nee	ion often, has difficulty eds and sources of rely seeks out knowledge ding	and source	ted, frequently id es of learning, an e and understand	id invites new	Highly self director identifies needs a and deliberately knowledge and u	ind sources of learning seeks out new

Interpersonal skills

1	2	3	4	5	6	7
Engages in nor	effective or judgmental	Usually e	ngages in effect	ive and on	Consistently eng	ages in highly effective
interactions with persons on the clinical		I judgmen	judgmental interactions with most			ntal interactions with all
setting and los	es focus in unexpected o	r persons	in the clinical set	ting and	persons in the cli	nical setting and
new situations		maintain	s focus in unexp	ected/new	responds excepti	onally well to
		situation	S		unexpected/new	situations

Communication skills

1	2	3	4	5	6	7
Exhibits poor wr	itten, verbal and non-	Exhibits a	cceptable writte	en, verbal and	Exhibits superior	written, verbal and

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verbal communication skills and lacks	non verbal communications skills and is	non verbal communication skills and
ability to modify information to meet	usually capable of modifying	readily modifies information to meet
the needs of various	information to meet the needs of	the needs of various
audiences/purposes	various audiences/purposes	audiences/purposes

Effective use of time and resources

1	2	3	4	5	6	7
Exhibits poor u	se of time and resources,	Obtains g	good results thro	ugh proper use	Consistently obtains maximum results	
shows lack of flexibility/adaptability,		of time a	of time and resources, shows adequate			use of time and
and seems incapable of setting goals		flexibility	flexibility/adaptability, and is capable of		resources, shows	unusual
		setting go	bals		flexibility/adapta	bility and sets realistic
					goals	

Use of constructive feedback

1	2	3	4	5	6	7		
Accepts feedb	ack defensively, does no	t Usually ad	Usually accepts, identifies, and			Seeks out, identifies, and eagerly		
identify of integrate feedback, provides		s integrates	integrates feedback from others, and			ack from others, and		
non constructi	ve , negative or untimely	/ frequentl	y provides appro	priate	constructive, tim	ely, and positive		
feedback to ot	hers	feedback	to others		feedback to othe	rs		

Problem solving

1	2	3	4	5	6	7	
Does not regul	arly recognize and define	Frequently recognizes and defines most			Consistently and insightfully recognizes		
problems, analyze data, develop and		problems. Analyzes data, develops and			and defines prob	lems, analyzes data,	
implement sol	nplement solutions and evaluate implements solutions and evaluate			evaluates	develops and imp	plements solutions, and	
outcomes		outcomes	5		evaluates outcon	nes	

Professionalism

1	2	3	4	5	6	7
concerning eth procedures, an	nable or poor conduct cs, regulations and d represents the n incompetent and er	concerni and proc	exhibits professions of the second structures and reproof in a competent of the second structures and reproof in a competent structure s	ions, policies esents the	concerning ethic and procedures,	ents the profession in a
					manner	

Responsibility

1 2	3	4	5	6	7
Demonstrates a poor level of commitment, is not dependable, not punctual, not aware of personal and professional limitations, and does not accept responsibility for actions and outcomes	commitm punctual, professio	ates an appropri ent, is usually de aware of person nal limitations, a ility for actions a	pendable, al and nd accepts	responsibilities, v always punctual,	r and above normal ery dependable, acutely aware of fessional limitations, esponsibility for

Critical thinking

1 2 3 4 5 6 7	_		<u> </u>						
		1	2	3	4	5	6	7	

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Does not identify, articulate, or analyze	Frequently identifies, articulates and	Readily identifies, articulates, and
problems, does not distinguish relevant	analyzes problems, distinguishes	analyzes problems, consistently and
from irrelevant, does not	relevant from irrelevant,	accurately distinguishes relevant from
recognize/differentiate among facts,	recognizes/differentiates among facts,	irrelevant, recognizes/differentiates
illusions and assumptions and does not	illusions and assumptions, and presents	among facts, illusions, and assumptions,
resent ideas	ideas	and generates original ideas

Stress management

1 2	3	4	5	6	7
Fails to identify sources of stress/problems in self and others, does not seek assistance or utilize coping skills, and is unsuccessful at balancing professional/personal life	stress/pro frequentl utilizes co	aware of source oblems in self an y seeks assistanc oping strategies a if professional/pe	d others, e as needed, and maintains	actively seeks ass appropriate, den	in self and others, sistance when nonstrates effective use nisms and successfully nce of

Technology Devices:

<u>Video & Audio Recordings</u>: Students may only tape record or video class activities and instructors with permission of the instructor and in no circumstance are allowed to post recordings on any internet site or social network site. The recording may only be utilized by the individual. Students who do not remain in compliance with this policy will be written up, put on probation, or potential dismissed from the program based upon the extent to which the policy has been disregarded.

<u>Personal Computer Use:</u> Personal computers are allowed in the classroom and lab for class purposes only i.e. following powerpoint presentations, taking notes, etc. Any student found utilizing his/her personal computer for any other purpose other than the current classroom activity may be asked to leave the classroom. Examples include but are not limited to: surfing the internet, checking e-mails, watching programs on the computer, etc.

<u>Cellular telephones and personal telephone calls.</u> Students are NOT to receive or place telephone calls or texts during class. Cellular telephones are to be turned off or set to vibrate before entering the classroom.

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Click Here for the MCC Attendance/Absences Policy

(https://www.mclennan.edu/highlander-guide/policies.html)

Click on the link above for the college policies on attendance and absences. Your instructor may have additional guidelines specific to this course.



ACADEMIC RESOURCES/POLICIES

Accommodations/ADA Statement:

Any student who is a qualified individual with a disability may request reasonable accommodations to assist with providing equal access to educational opportunities. Students should contact the Accommodations Coordinator as soon as possible to provide documentation and make necessary arrangements. Once that process is completed, appropriate verification will be provided to the student and instructor. Please note that instructors are not required to provide classroom accommodations to students until appropriate verification has been provided by the Accommodations Coordinator. For additional information, please visit www.mclennan.edu/disability.

Students with questions or who require assistance with disabilities involving physical, classroom, or testing accommodations should contact:

disabilities@mclennan.edu 254-299-8122 Room 319, Student Services Center

Title IX:

We care about your safety, and value an environment where students and instructors can successfully teach and learn together. If you or someone you know experiences unwelcomed behavior, we are here to help. Individuals who would like to report an incident of sexual misconduct are encouraged to immediately contact the acting Title IX Coordinator at <u>titleix@mclennan.edu</u> or by calling, Dr. Claudette Jackson, (Diversity, Equity & Inclusion/Title IX) at (254) 299-8465. MCC employees are mandatory reporters and must report incidents immediately to the Title IX Coordinator. Individuals may also contact the MCC Police Department at (254) 299-8911 or the MCC Student Counseling Center at (254) 299-8210. The MCC Student Counseling Center is a confidential resource for students. Any student or employee may report sexual harassment anonymously by visiting <u>http://www.lighthouse-services.com/mclennan/</u>.

Go to McLennan's Title IX webpage at <u>www.mclennan.edu/titleix/</u>. It contains more information about definitions, reporting, confidentiality, resources, and what to do if you or someone you know is a victim of sexual misconduct, gender-based violence or the

crimes of rape, acquaintance rape, sexual assault, sexual harassment, stalking, dating violence, or domestic violence.

Student Support/Resources:

MCC provides a variety of services to support student success in the classroom and in your academic pursuits to include counseling, tutors, technology help desk, advising, financial aid, etc. A listing of these and the many other services available to our students is available at http://www.mclennan.edu/campus-resource-guide/

Academic Support and Tutoring is here to help students with all their course-related needs. Specializing in one-on-one tutoring, developing study skills, and effectively writing essays. Academic Support and Tutoring can be found in the Library and main floor of the Learning Commons. This service is available to students in person or through Zoom from 7:30 am - 6:00 pm Monday through Thursday and 7:30 am - 5:00 pm on Friday. You can contact the Academic Support and Tutoring team via Zoom (https://mclennan.zoom.us/j/2542998500) or email (ast@mclennan.edu) during the above mentioned times.

College personnel recognize that food, housing, and transportation are essential for student success. If you are having trouble securing these resources or want to explore strategies for balancing life and school, we encourage you to contact either MCC CREW – Campus Resources Education Web by calling (254) 299-8561 or by emailing <u>crew@mclennan.edu</u> or a Success Coach by calling (254) 299-8226 or emailing <u>SuccessCoach@mclennan.edu</u>. Both are located in the Completion Center located on the second floor of the Student Services Center (SSC) which is open Monday-Friday from 8 a.m.-5 p.m.

Paulanne's Pantry (MCC's food pantry) provides free food by appointment to students, faculty and staff. To schedule an appointment, go to <u>https://mclennan.co1.qualtrics.com/jfe/form/SV_07byXd7eB8iTqJg</u>. Both the Completion Center and Paulanne's Pantry are located on the second floor of the Student Services Center (SSC).

MCC Foundation Emergency Grant Fund:

Unanticipated expenses, such as car repairs, medical bills, housing, or job loss can affect us all. Should an unexpected expense arise, the MCC Foundation has an emergency grant fund that may be able to assist you. Please go to <u>https://www.mclennan.edu/foundation/scholarships-and-resources/emergencygrant.html</u> to find out more about the emergency grant. The application can be found at <u>https://www.mclennan.edu/foundation/docs/Emergency_Grant_Application.pdf</u>.

MCC Academic Integrity Statement:

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Go to <u>www.mclennan.edu/academic-integrity</u> for information about academic integrity, dishonesty, and cheating.

Minimum System Requirements to Utilize MCC's D2L|Brightspace:

Go to <u>https://www.mclennan.edu/center-for-teaching-and-learning/Faculty-</u> andStaffCommons/requirements.html for information on the minimum system requirements needed to reliably access your courses in MCC's D2L|Brightspace learning management system.

Minimum Technical Skills:

Students should have basic computer skills, knowledge of word processing software, and a basic understanding of how to use search engines and common web browsers.

Backup Plan for Technology:

In the event MCC's technology systems are down, you will be notified via your MCC student email address. Please note that all assignments and activities will be due on the date specified in the Instructor Plan, unless otherwise noted by the instructor.

Email Policy:

McLennan Community College would like to remind you of the policy (<u>http://www.mclennan.edu/employees/policy-manual/docs/E-XXXI-B.pdf</u>) regarding college email. All students, faculty, and staff are encouraged to use their McLennan email addresses when conducting college business.

A student's McLennan email address is the preferred email address that college employees should use for official college information or business. Students are expected to read and, if needed, respond in a timely manner to college emails. For more information about your student email account, go to <u>www.mclennan.edu/studentemail</u>.

Instructional Uses of Email:

Faculty members can determine classroom use of email or electronic communications. Faculty should expect and encourage students to check the college email on a regular basis. Faculty should inform students in the course syllabus if another communication method is to be used and of any special or unusual expectations for electronic communications.

If a faculty member prefers not to communicate by email with their students, it should be reflected in the course syllabus and information should be provided for the preferred form of communication.

Email on Mobile Devices:

The College recommends that you set up your mobile device to receive McLennan emails. If you need assistance with set-up, you may email <u>Helpdesk@mclennan.edu</u> for help.

You can find help on the McLennan website about connecting your McLennan email account to your mobile device:

- Email Setup for iPhones and iPads
- Email Setup for Androids

Forwarding Emails:

You may forward emails that come to your McLennan address to alternate email addresses; however, the College will not be held responsible for emails forwarded to an alternate address that may be lost or placed in junk or spam filters.

For more helpful information about technology at MCC, go to <u>MCC's Tech Support</u> <u>Cheat Sheet</u> or email <u>helpdesk@mclennan.edu</u>.

Disclaimer:

The resources and policies listed above are merely for informational purposes and are subject to change without notice or obligation. The College reserves the right to change policies and other requirements in compliance with State and Federal laws. The provisions of this document do not constitute a contract.