

Montgomery College Physical Therapist Assistant Program
PHTH 112- Pathology for the Physical Therapist Assistant

- II. Differentiate between normal and pathological physiologic function in various disease states.
 - A. Describe the anatomy and physiology of the cell
 - B. Describe the physiological mechanisms of injury at the cellular level, including necrosis and inflammatory response
 - C. Describe the physiology of cellular and tissue repair
 - D. Identify the phases of wound healing
 - E. Explain the complications of wound healing
 - F. Analyze how physical therapy can be used to reduce inflammation and facilitate wound healing
 - G. Compare and contrast the healing process in bone, ligament, muscle, and tendon
 - H. Discuss various pain control theories
 - I. Discuss conditions associated with chromosome abnormalities, genetically linked diseases, and hereditary conditions

- III. Discuss impairments, **functional limitations** and handicaps associated with various disease states.
 - A. Explain the etiology of pathologies related to the various body systems: cardiovascular, endocrine, integumentary, lymphatic, musculoskeletal, nervous, respiratory, and renal
 - B. Discuss the impact of pathology on the various systems in the body
 - a. discuss single system pathology
 - b. discuss how multiple systems are affected by pathology
 - C. Identify the clinical manifestations related to the specific disease state that is evaluated and treated within the scope of physical therapy practice.
 - a. discuss signs and symptoms associated with pathology in the affected system
 - b. discuss signs and symptoms that will be “red flags” and “yellow flags”
 - c. discuss emergency responses needed for red flags
 - d. discuss responses needed for yellow flags
 - D. Explain how specific disease states are affected by such factors as aging, environment, nutrition and substance abuse.
 - E. Discuss how pathology and or disease states produce impairments, functional limitations, and handicaps
 - a. differentiate functional limitations from handicaps
 - b. discuss the relationship between impairments and functional limitations

- IV. Discuss medical tests and interventions typically utilized for various disease states.
 - A. Identify physical examination, imaging and lab tests used to make a diagnosis
 - B. Identify medical, surgical, and physical therapy interventions used to treat various disease states

- V. Discuss the potential impact of physical therapy intervention for various disease states.
 - A. Describe physical therapy interventions for specific diseases using the recommended course book, and the *Guide to Physical Therapy Practice as an additional reference.*
 - B. Discuss the contraindications and precautions a physical therapist assistant needs to know when treating patients with a specific disease state
 - C. Discuss the rehabilitation management of various pathologies
 - D. Develop general interventions within a plan of care for a patient diagnosed with a specific pathology studied

- VI. Educate other individuals about normal physiological function and pathology.
 - A. Describe specific diseases in terms that the patient can understand (i.e., what is the problem; how did I get this condition; will I get better or worse, how is this treated, and what can I do about this disease?)
 - a. Recall and explain normal and abnormal function of a system in terms understood by the general public
 - B. Discuss a specific disease state using appropriate medical terminology.
 - a. Construct communication strategies with inter- and intraprofessional groups (eg. SBAR, SOAP)

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- C. Analyze publically available resources and information critically for their comprehensiveness and usefulness for patient education.

Required Text, References and Internet References:

- I. Lescher, Penelope, J. (2011). *Pathology for the Physical Therapist Assistant*. Philadelphia, PA: F.A. Davis Company.

Available in MLC:

- I. *The Guide to Physical Therapy Practice*. Alexandria, VA: American Physical Therapy Association
- II. Suggested internet resources:
 - a. <http://www.nih.gov> (Pub Med)
 - b. <http://www.webmd.com>
 - c. StatRef! On the MC Library web page
 - d. Taber's /Tabers online (medical terminology)
 - e. <http://www.aafp.org> (*American Family Physician*, this internet reference can be used for class presentations, also)

Teaching methods and learning experiences, use the following: lecture, group discussions, question and answer sessions, audiovisual materials, electronic databases searches, student generated comparison charts, and supplemental learning materials generated by the student, self-directed and self-study for assigned medical diagnoses, and medical terminology; read medical narratives, and present academic power-point presentation for class.

Evaluation and Grading: - See *Student Handbook* for grading scale. All components and assignments of this course must be successfully completed in order to earn a passing grade. This course will be graded on a point system.

Written exams 3	60%	Quizzes (on-line – 6)	18%
Case study (on-line 4)	12%	Assignment # 1	5%
Assignment # 2	5%		

Written exams: each exam will include questions on the anatomy and physiology of the normal system, the vocabulary, and the pathology in each instructional unit. Each exam is cumulative. 20% of the final exam questions will come from the pathologies presented in the pathology project. See Blackboard for more information and more detailed study guides.

Assignment #1: Summarize an assigned body system in the form of a power point presentation. This assignment will be presented as a group presentation to the class. Groups are assigned at the start of the semester. Present a 15 – 20 minute presentation summarizing the anatomy and physiology of the system under discussion. Include 5 – well developed exam quality questions to check your classmates' understanding. See Reproductive System example on Blackboard. *Submit this project to the instructor as an electronic file. Once facts and content are checked, this presentation is posted on Blackboard.*

Assignment #2: Famous person (or someone in your life) with a pathology. Describe the pathology and the “textbook” description of onset, system involvement, how diagnosed, typical prognosis, how treated from a medical and or surgical prospective, need for physical therapy and effect of aging and or environmental factors. Include in the paper an explanation if the specific disease develops differently in the pediatric population, as compared to geriatric population. Comment on the way in which the “textbook” descriptions of diagnosis, prognosis, etc, are the same or different from the actual experience of the famous person (or person in your life). *See Obesity example in Blackboard.*

Course requirements:

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Attendance: On time attendance of all lecture and laboratory sessions are mandatory. The skills taught and practiced in this course are essential to physical therapy assistant practice. MC college-wide regulations state that if a student misses more than two classes (equivalent to one week of classes), then the student may be dropped from the course. All absences are considered unexcused with the exception of court appearances, sudden hospitalization, religious observation, natural disaster, or family emergency. In order to be considered an excused absence, the student must provide documentation. Emergencies will be allowed and considered after consultation with a faculty member, and written documentation for support. Three late arrivals will count as one absence from class. Two absences will result in a decrease of the final grade by one letter, (An “A” becomes a “B,” etc.)

Scoring rubrics will be posted on the Blackboard or submitted by e-mail.

Late Policy: If the student has determined that he or she will be late, it is the student’s responsibility to talk to the instructor or the department administrator (Ms. Randolph) at least 24 hours before the start of class. If neither is available, then you leave a voice mail message at (240) 567-5520 and send an email to Professor Greenawald.

Make up policy: If the student must be absent during a quiz, practical or written exam, he/she will notify the instructor by telephone or e-mail at least 24 hours in advance. In order to qualify for a makeup quiz, practical or written examination, the reason for absence must be documented. As stated above, only court appearance, sudden hospitalization, religious observation, natural disaster, or family emergency will be considered appropriate reasons.

Make-up written quizzes and exams are taken in the Medical Learning Center. The instructor reserves the right to alter the content or format of any make up quizzes, written or practical exams in order to preserve the academic integrity of the assessment.

Extra credit: No additional assignments outside of those scheduled on this syllabus, termed extra” credit, will be given for grade improvement.

Student Code of Conduct and Academic Honesty: Students are referred to the Student Handbook as well as Academic and Student Services web pages for details. <http://www.montgomerycollege.edu/departments/academic/vp>

Classroom Behavior: Each and every student is expected to behave in ways which promote a positive learning atmosphere. Students have the right to learn; however, they do not have the right to interfere with the freedom of the faculty to teach or the rights of other students to learn. Students are treated respectfully; and in return, are expected to interact respectfully with peers and faculty.

All class discussions are carried out in a way that keeps the classroom environment respectful of the rights of others. This means that, for example, students should not interrupt someone else who is talking regardless of whether that person is the instructor or another student. Students should not monopolize class time by repeatedly interrupting and asking questions in a manner which hinders the learning process of others.

Students are also expected to conduct themselves in ways which create a safe learning and teaching environment that is free from such things as violence, intimidation, and harassment. Talking on cellular telephones, sending or receiving instant messages, and/or listening to audio devices during class or laboratory is not consistent with a supportive and respectful learning environment.

Further information on behavioral expectations is available in the *Student Handbook*, and the *Student Code of Conduct* mentioned above.

Electronic mail: Student e-mail (montgomerycollege.edu) is an official means of communication for the College. It is expected that students check student e-mail regularly and frequently, as you are responsible for information and announcements that will be sent to you from the College.

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For this class, student e-mail will be used in situations where timing is essential. If students contact the instructor through e-mail, they must use the MC student e-mail account (rather than a personal account) so the instructor will recognize this as a student communication. Please use the following line in the subject line: ***STUDENT NAME WITH QUESTION IN PHTH-112.***

Important Student Information Link

In addition to course requirements and objectives that are in this syllabus, Montgomery College has information on its web site (see link below) to assist you in having a successful experience both inside and outside of the classroom. It is important that you read and understand this information. The link below provides information and other resources to areas that pertain to the following: student behavior (student code of conduct), student e-mail, the tobacco free policy, withdraw and refund dates, disability support services, veteran services, how to access information on delayed openings and closings, how to register for the Montgomery College Alert System, and finally, how closings and delays can impact your classes. If you have any questions, please bring them to your professor. As rules and regulations change they will be updated and you will be able to access them through the link. If any student would like a written copy of these policies and procedures, the professor would be happy to provide them. By registering for this class and staying in this class, you are indicating that you acknowledge and accept these policies.

<http://cms.montgomerycollege.edu/mcsyllabus/>

Any student who has difficulty accessing sufficient food to eat every day, or who lacks a safe and stable place to live, is urged to contact Dr. Clemmie Solomon (TPSS) or look for support resources on the Student Affairs web page. <http://cms.montgomerycollege.edu/edu/secondary5.aspx?urlid=55>

We know that issues around food and shelter can affect your academic performance. If you feel comfortable, please discuss your concerns with any of your instructors. We are committed to your success and will assist you in any way that we can.

Course evaluations: The College has recently changed the semester course evaluation system on-line. Students will be notified via campus communication systems about when the course evaluation is active. The PTA Program faculty considers course evaluations to be good practice at giving professional feedback. In addition, the faculty uses course evaluation data to improve the learning experience for future students.

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COURSE SCHEDULE

Text: Lescher, Penelope. *Pathology for the Physical Therapist Assistant*

For the Week of	Class topic	Reading	On-Line Assignments
	All unit exams are scheduled for WEDNESDAYS – 2 hour class time means exam will be from 11 am – 1 pm. On these days, arrangements are made with PHTH 101 or PHTH 113 to begin 45 minutes later to allow students to have a lunch break	Lescher	
August 27, 29	Intro to the Course, Course requirements. Introduction to Pathology within context of PCMM, Inflammation and Tissue healing; Immune Genetic and Hereditary problems	Chapter 1 ; Ch 2 (not neoplasms)	
Sept 3	LABOR DAY, no class Read and Review Posted Power points		
Sept 5	Presentation – Group # 1: Normal Skeleton anatomy and physiology – The bone game		
Sept 10/12	Presentation – Group # 2: Normal muscular anatomy and physiology – the muscle game Signs/symptoms of musculoskeletal system, DJD and bone pathology	Chapter 5	Quiz # 1 – due by Sunday, Sept 9 at 11 pm
September 17/19	Rheumatology <i>Sept 19: Catch up on worksheets/ cases / quizzes Dr. Greenawald and seniors working with falls risk screening at Holy Cross Senior Services – you are welcome (11:30 – 1:00 or 1:00 – 2:00)</i>	Chapter 6	Case study discussion # 1– response by Sunday, Sept 16 at 11 pm
September 24 / 26	Presentation – Group # 3: Normal integument Signs /symptoms integument; Pathology	Chapter 8	Quiz # 2 – due by Sunday, Sept 23 at 11 pm
Oct 1	Case studies and exam # 1 prep		
Oct 3	EXAM # 1		
Oct 8 / 10	Presentations – Group # 4 & # 5: Normal cardio/circulatory anatomy and physiology and Normal respiratory anatomy and physiology Signs / symptoms of cardiocirculatory and respiratory systems; Cardiocirculatory pathology	Chapter 3	Case study discussion # 2 – response due by Sunday, Oct 7 at 11 pm
Oct 15 / 17	Respiratory pathology; Presentation – Greenawald Normal reproductive system; signs symptoms of reproductive system; reproductive pathology	Chapter 4; Chapter 11	Quiz # 4 - due by Sunday, Oct 14 at 11 pm
Oct 22 / 24	Presentations – Group # 6 & # 7: Normal Gastrointestinal anatomy and physiology and Normal Urinary anatomy and physiology Signs and symptoms in GI and GU systems; pathology in GI/GU systems	Chapter 12	Case study discussion # 3 - response due by Sunday, Oct 21 at 11 pm
Oct 29	Cancer (portions of chapter 2); Case studies	Ch 2 – only cancer	Quiz # 5 - due by Sunday, Oct 28 at 11 pm
OCT 31	EXAM # 2		
Nov 5 / 7	Presentations: Groups # 8 & # 9: Upper motor neuron // Lower motor neuron Normal anatomy and physiology; normal development and the brain game Signs / symptoms in neuromuscular system; neuromuscular pathology	Chapter 7	
Nov 12 / 14	Geriatrics; Endocrine/metabolic/nutrition	Chapter 14; Chapter 9	Case study discussion # 4 - response due by Sunday, Nov 11 at 11 pm
Nov 19	Infectious diseases	Chapter 10	Quiz # 6 due by Sunday, Nov 18 at 11 pm

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Nov 21	Thanksgiving Holiday		
Nov 26 / 28	Summary and Oral Presentations		
Dec 3	Review for final exam		
Dec 5	EXAM # 3		

The instructor reserves the right to adjust class topics, lab skills, readings or assignments based on the learning needs of the students.

IMPORTANT DATES for Fall Semester 2018

Classes start: August 27, 2018

Classes end: December 7, 2018

Final exam week: December 10-14, 2018

Professional Activities

DC/Maryland Annual Conference 2018	November 3	Towson, MD
DC/Maryland Student Conclave 2018	November 17	Ellicott City, MD
National Student Conclave 2018	October 11-13	Providence, RI
Combined Sections Meeting 2019	January 23-26	Washington, DC
Advocacy Day on the Hill 2019	tba	Washington, DC
DC/Maryland Spring Conference 2019	March 30	Silver Spring, MD
Annual Conference NEXT 2019	June 12 -15	Chicago, IL

Check the following web sites for chapter and section meetings in 2018 - 2019

www.apta.org	Open Membership and Leadership page, select Chapters and Sections
www.aptamd.org	APTA of Maryland, select Meetings
www.dcpta.com	APTA of Washington DC, select Meetings