PTA 112 Pathology

Summer 2014

Instructor: Kristen Collins
mecpt@msn.com

Course Director: Barbara J. Behrens
behrensb@mccc.edu

Course #:
PTA 112

Course Title:
Pathology

Credit Hours:(Lecture/Lab)
3/0

Contact Hours:
45

Number of weeks:
8

Pre-requisite course(s):
BIO 104 Anatomy & Physiology II

TEXTS

Required Text(s):


Course Description:
This course is open to all students interested in physical therapy as a career or in the study of human diseases. It is a required course for Physical Therapist Assistant majors. The course is designed to familiarize the student with the essential nature of diseases, abnormalities of structure and function that are characteristic of diseases.

Course Outline:

I Disease
A. Definitions & Causes
B. Mortality & Morbidity

II General Principles
A. Fluid & Hemodynamic Disorders
B. Body Fluids
C. Inflammation & Tissue Repair
1. Integumentary system

III Diseases of systems, organs & the medications utilized
A. Circulatory system
1. Heart
2. Blood vessels
B. Pulmonary system
C. Endocrine system
D. Central Nervous System
E. Peripheral Nervous System
F. Musculoskeletal System

Course Grading:

<table>
<thead>
<tr>
<th>% of grade</th>
<th>Activity</th>
<th># within course</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>Exam(s)</td>
<td>3</td>
</tr>
<tr>
<td>30</td>
<td>Paper(s)</td>
<td>4 mini</td>
</tr>
<tr>
<td>10</td>
<td>Presentation(s)</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>Class Participation/Generic Abilities</td>
<td>Continuous</td>
</tr>
</tbody>
</table>

Generic Abilities Assessment (10% of overall course grade)

Generic abilities include a collection of behaviors that in addition to knowledge and skills are considered important for student/learners to be successful as future employees in the healthcare environment.

Adapted from May, et. al. Journal of Physical Therapy Education, 9:1, Spring, 1995

<table>
<thead>
<tr>
<th>10 pts</th>
<th>Category</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5</td>
<td>Commitment to Learning</td>
<td>- Consistently <strong>attends the entirety of all classes and/or lab sessions</strong> and if unable to attend class, proactively assumes responsibility for learning by contacting the course instructor via email to alert him/her of the absence or reason for early departure which would result in disruption of the learning for that day</td>
</tr>
</tbody>
</table>
| 2.5    | Communication Skills      | - Is respectful to classmates, guest speakers, and faculty members in all forms of communication (verbal, non-verbal, written, email, etc.)  
- uses correct grammar, accurate spelling and expression, writes legibly |
| 2.5    | Professionalism           | - Comes to class **prepared to start on time** and if unable to start class/lab on time then proactively contacts the course instructor via email to alert him/her of the lateness and finding out whatever work might need to be made up from a classmate |
| 2.5    | Responsibility            | - Is aware of and accepts responsibility for his/her own work and progress within a course which includes awareness of the impact of assignment grades on overall course grade  
- Discusses confidential concerns with course instructor including but not limited to grades having considered potential strategies for self-improvement |

PTAP Policy: COURSE GRADING

One of the goals of the MCCC PTAP is to prepare student/learners to ultimately practice as PTAs after completing the PTA program. In New Jersey, as in many other states, PTAs are required to be licensed. Licensure is granted following the successful completion of a standardized licensing exam, which has a normalized passing score above what Mercer uses as a passing score.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>93-100</td>
</tr>
<tr>
<td>A-</td>
<td>90-92</td>
</tr>
<tr>
<td>B</td>
<td>83-86</td>
</tr>
<tr>
<td>B-</td>
<td>80-82</td>
</tr>
<tr>
<td>C</td>
<td>70-76</td>
</tr>
<tr>
<td>C+</td>
<td>77-79</td>
</tr>
<tr>
<td>D</td>
<td>60-69</td>
</tr>
</tbody>
</table>

Grades below 77 are not considered passing grades for PTAP courses, and are therefore considered unacceptable. All PTAP courses must be completed with a grade of “C+” or higher.
Written Assignments

Grading Criteria for all written assignments is provided with the assignment and it is the responsibility of the student/learner to consult with the grading criteria or grading rubric for the assignment prior to submitting the assignment, to assure that the requirements have been met to the best of his or her abilities.

*Please note that a penalty of 5 points per day may be imposed for late submission of assignments.*

COURSE GOALS:

Following the successful completion of this course with a grade of C+ or higher, the learner will be able to:

PTA 112 Pathology

Course Goals: Following the successful completion of this course with a grade of C+ or higher, the learner will be able to:

1. Describe the importance of understanding the differences between normal and abnormal function of physiologic systems and how they will affect an individual's ability to interact with his or her environment.
2. Explain the differences between various disease processes and why they affect systems of the body in specific ways.
3. Recognize and respect psychosocial differences in how a patient will be able to understand or accept a disease process and interact with patients on an individual basis rather than as a stereotype or as "a diagnosis."
4. Recognize the importance of identifying a patient's psychological perceptions about his or her condition and what information can be explained to him or her by explaining the disease process in terms that the patient can understand.

COURSE OBJECTIVES:

Following the successful completion of this course the learner will possess skills in the following domains:

Cognitive/Knowledge: the learner will be able to:
1. describe the disease process throughout various systems of the body.
2. differentiate between different types of infections and infectious diseases.
3. explain the processes of inflammation and tissue repair.
4. list types of musculoskeletal injuries common for each phase of the life span.
5. analyze medication information sheets for potential side effects that will manifest themselves in the musculoskeletal system.
6. describe pain as a component of the inflammatory response
7. describe processes for disease transmission and prevention

Affective: the learner will be able to:
1. recognize and respect psychosocial differences in how a patient will be able to understand or accept a disease process
2. recognize the importance of pain as a psychological and physiological response to injury and differentiate between the two
3. recognize the importance of recognizing a patient’s psychological perceptions about his or her condition and what information can be explained to him or her
4. recognize the importance of vital signs as an indication of the extent of involvement the disease or injury has on the overall condition of a patient

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**Confidentiality Expectations**

**Classmates:**
Periodically during the course of the semester, individuals among your classmates may be asked to share physical anomalies or previous injuries and treatments with the PTAP class. If an individual chooses to share this information with the class, it is NOT to leave the classroom. If an individual does not wish to share a personal diagnosis or anomaly with the class, it is within his or her right not to do so.

Volunteers will be solicited for laboratory demonstrations. Information obtained during lab exercises is intended for demonstration purposes only. It is the right of every individual NOT to volunteer for a demonstration. However, all student/learners are expected to participate in lab activities to the best of his or her ability. This participation may involve the removal of minor articles of clothing. In the event that clothing is removed, draping techniques will be employed to preserve the dignity of the individual.

**Faculty:**
Any and all individuals who elect to allow themselves to be "the patient" during class and lab activities can expect that all information gained during the activity will remain confidential. This extends to all MCCC faculty and MCCC staff, who volunteer to be “patients.”

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**Class Philosophy:**
Those who enroll in PTAP courses will be expected to accept responsibility for their learning, and as such will be considered learners.

**Learners identify:**
- topic areas that are of particular interest to them for the purpose of paper assignments
- topic areas that present challenges to them
- strategies for meeting his or her individual needs to master the information

**Learners also:**
- actively participate in the presentation/discussion of course materials
- actively participate in the negotiation of a class schedule that meets the objectives for the course and for the learners
- respect the interests and needs of other learners or faculty
- work together toward a meaningful understanding of the materials presented.
Reasonable Accommodations

On July 26, 1990, the President of the United States signed the Americans with Disabilities Act (P.L. 101-336). The ADA is intended to remove barriers against the more than 43 million people with disabilities in the United States. If you have a documented learning disability, psychological disability, physical disability, or other hidden disability that requires an accommodation, it is your responsibility to make an appointment to meet with the course director and potentially the PTA program coordinator prior to the due date for any course examinations or assignments to discuss what accommodations might be necessary.

Mercer County Community College & the Americans with Disabilities Act

Any student/learner in any class who has special needs because of a disability is entitled to receive accommodations. Eligible students at Mercer County Community College are assured services under the Americans with Disabilities Act and Section 504 of the Rehabilitation Act of 1973.

If someone believes that he or she is eligible for services, it is that individual's responsibility to contact Arlene Stinson, the Director of Academic Support Services. Ms. Stinson's office is LB217, and she can be reached at (609) 570-3525.

A list of Essential Functions for the PTA program student/learners and graduates is available through the PTA program website.

Exams in the Academic Testing Center (ATC)

Mercer County Community College has an Academic Testing Center on campus in the Student Center which makes it possible for exams to be administered outside of class time, allowing student/learners the ability to schedule their own time for testing. This also permits more judicious use of class time for lectures and labs rather than testing. The following list represents some things to remember when using the (ATC)

1. Anyone taking "Scantron" exams in the testing center will need to keep the “Testing Center Report Form” that is provided at the completion of the exam.
   a. This form indicates the grade that was earned and which test questions were incorrect.
   b. This form should be retained as a record of the exam.
2. Anyone taking an exam in the testing center is required to present a current Mercer ID
   a. one that has a sticker on it indicating the current semester
      i. issued by the security office in the student center
3. The Academic Testing Center typically is open on the West Windsor Campus as follows:

<table>
<thead>
<tr>
<th>Semester</th>
<th>Days</th>
<th>Times</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall and Spring</td>
<td>M-R (closed on Fridays)</td>
<td>9am-7:30pm</td>
</tr>
<tr>
<td></td>
<td>Saturdays</td>
<td>9am-2:30pm</td>
</tr>
<tr>
<td>Summer Sessions</td>
<td>M-R (closed on Fridays)</td>
<td>9am-7:30pm</td>
</tr>
<tr>
<td></td>
<td>Saturdays</td>
<td>9am-12:30pm</td>
</tr>
</tbody>
</table>

   a. It is the responsibility of the student/learner to make sure that he/she has verified the operating hours for the Academic Testing Center
   i. This is subject to change from semester to semester
Recording an Instructor:

1. Audio recording of the instructor during lecture and lab will only be permitted for those student/learners who have documentation stating that audio recordings are a reasonable accommodation for that student/learner.
   a. Information regarding Documentation for Reasonable Accommodation can be obtained from Arlene Stinson the Director of Academic Support Services. Ms. Stinson’s office is LB217, and she can be reached at (609) 570-3525 or via email at stinsona@mccc.edu.

2. Audio recording under these circumstances will be permitted once a copy of the appropriate documentation has been provided to the instructor.

3. Video recording of the instructor during lecture and lab are not permitted under any circumstance without prior written approval from the instructor.

Attendance for PTA program Courses:

1. Mercer County Community College does not have a "cut system." Student/learners in PTA program courses are required to attend all lecture, lab, competency testing and clinical affiliation sessions. Attendance records are maintained.

2. Attendance is required for all courses for all learners. If someone is going to be absent from a scheduled class, it is the responsibility of the individual to notify the course instructor in writing to inform him or her of the absence and how the work for that day will be made up. Copies of any class handouts that might have been distributed will be available in the course folders within the classroom. It is the responsibility of the learner to check the folder for the class that was missed to see if there was a new handout. It is not the instructor’s responsibility to attempt to keep track of who might have been present or who might have missed something that was discussed in class.

3. Official college closings or delayed openings are broadcast via several different mechanisms including local radio stations, the college radio station WWFM, 89.1 and Malert which will text smartphones and send emails to registered users affiliated with Mercer County Community College. It is the student/learner's responsibility to observe these notifications when they occur and act accordingly. Notices of emergency closings are also announced on the college website at www.mccc.edu.

Continued matriculation following acceptance in the PTA program indicates that the student/learner has agreed to accept and uphold his or her commitment to these policies.

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<table>
<thead>
<tr>
<th>Course Schedule:</th>
<th>Summer 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture</td>
<td>T,R 6-8:30pm</td>
</tr>
<tr>
<td>Location:</td>
<td>LA 210</td>
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</table>
Learning Units

<table>
<thead>
<tr>
<th>Unit</th>
<th>Goals:</th>
<th>Learning Objectives</th>
</tr>
</thead>
</table>
| **Unit 1** | Cell Structure, Function & Pathology  
Inflammation, Immunopathology | 3, 4, A, D | C1, C2, C3, C6, C7, A1 |
| **Unit 2** | Neoplasia, Genetic & Developmental Diseases | 1, 3, 4, A, D, E | C1, C4, A1, A3 |
| **Unit 3** | Fluid & Hemodynamic Disorders  
Cardiovascular System, Respiratory System  
Hematopoetic & Lymphoid Systems | 1, 3, 4, A, D, E | C1, C5, A4 |
| **Unit 4** | Gastrointestinal, Liver & Biliary Systems  
The Pancreas & Endocrine Systems | 1, 3, 4, A, D, E | C1, A3 |
| **Unit 5** | The Integumentary System & Tissue Healing | 1, 3, 4, A, D, E | C1, C3 |
| **Unit 6** | Bones & Joints  
The Muscular & Nervous Systems | 1, 3, 4, A, D, E | C1, C3, C4 |

Syllabus

PTA 112 Pathology

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic(s)</th>
<th>Chapter(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5/27</td>
<td>Pharmacology, Cell Structure, Function &amp; Pathology</td>
<td>3</td>
</tr>
<tr>
<td>5/29</td>
<td>Inflammation</td>
<td>3</td>
</tr>
<tr>
<td>6/4</td>
<td>Immunopathology, Infectious Disease</td>
<td>4, 5</td>
</tr>
<tr>
<td>6/6</td>
<td>Infectious Disease (Continued), Neoplasia</td>
<td>6, 16</td>
</tr>
<tr>
<td>6/11</td>
<td>Genetic &amp; Developmental Diseases</td>
<td>14</td>
</tr>
<tr>
<td>6/13</td>
<td>Fluid &amp; Hemodynamic Disorders</td>
<td>10, 2 (pgs. 35-46)</td>
</tr>
</tbody>
</table>

**WE #1**

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic(s)</th>
<th>Chapter(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6/18</td>
<td>Cardiovascular System</td>
<td>9</td>
</tr>
<tr>
<td>6/20</td>
<td>Respiratory System</td>
<td>11</td>
</tr>
<tr>
<td>6/27</td>
<td>The Pancreas &amp; Endocrine Systems</td>
<td>8</td>
</tr>
<tr>
<td>7/2</td>
<td>The Integumentary System &amp; Tissue Healing</td>
<td>7</td>
</tr>
<tr>
<td>7/4</td>
<td>Happy 4th of July</td>
<td>No Class</td>
</tr>
</tbody>
</table>

**WE #2**

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic(s)</th>
<th>Chapter(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/9</td>
<td>Bones &amp; Joints</td>
<td>13, 15, 17</td>
</tr>
<tr>
<td>7/11</td>
<td>The Muscular System</td>
<td>13, 15, 17</td>
</tr>
<tr>
<td>7/16</td>
<td>The Nervous System</td>
<td>18, 20, 21</td>
</tr>
<tr>
<td>7/18</td>
<td>The Nervous System (Continued)</td>
<td>18, 20, 21</td>
</tr>
</tbody>
</table>

**WE #3 in class on 7/23**

This schedule is negotiated between the learners and the instructor. Listed dates are suggestions and will be mutually determined. Due dates for assignments will also be mutually agreed upon by the class members and the instructor.
Please note that for some of the topics, the syllabus DOES NOT follow the sequence of the textbook. If a topic is covered in a chapter other than the assigned reading, a reasonable attempt will be made to specify other pages related to topic.

Papers and Other Assignments

These assignments are designed to familiarize you with the materials that are being covered in class and to strengthen your understanding of how pathology relates to you and your patients. None of the papers should exceed 5 pages*.

1. Medicine Cabinet Observations

Due Date:______________

Objectives:

⇒ To identify several different classifications of medications
⇒ To group common medications of different names that are utilized for the same indications
⇒ To familiarize you with the side effects of readily available medications
⇒ To recognize patterns of medication use among family members

Open the medicine cabinet in your home or wherever you keep medications, and

• outline the contents organizing them into
  o analgesics
  o anti-inflammatory medications and
  o other
• Read the precautions, indications, and discard any medications that are past their expiration date.
• Briefly summarize what you found and what you learned from the assignment.

2. Celebrity Status and Disease

Due Date:______________

• Select a celebrity from the following list of individuals, and
• describe how their life has changed since he/she was diagnosed with his/her life altering disease.(You will need to consult at least 5 references using both Print and web based sources and list them in your bibliography at the end of the paper use the PTA Program Documentation Style Guide!)

  Annette Funicello    Farrah Fawcett    Magic Johnson
  Montel Williams     Michael J. Fox    Mary Tyler Moore
  Muhammad Ali       Steve Jobs       Former President Ronald Reagan
  Christopher Reeve  Phil Mickelson   Larry King
  Bob Marley          Sally Field     Itzhak Perlman
  Sheryl Crow         Lou Gehrig     Kirk Douglas
  Sharon Osbourne    Roger Ebert      Nick Jonas

Describe each of the following factors as they relate to the disease:

  o Etiology
  o Pathology
  o Prognosis
  o Symptoms
  o Treatment

3. Online Support for Disease

Due Date: ________________
Perform an Internet Search for a support group that would be helpful for someone diagnosed with the same diagnosis as the celebrity that you selected in your second paper.

This support group must have:
- a chat room
- accurate medical information regarding the disease
- links to other sites for information that might be of interest

4. Presentation Outline OR PowerPoint Presentation* Due Date: _____________
Select a diagnosis from the following list and prepare an outline for a discussion to share with your classmates that addresses all of the bulleted items. You may NOT select the disease that your “celebrity paper” covered. You must select another topic for this outline and fill in the details about that condition.
*if you opt to present this in a PowerPoint presentation it will take more than 5 pages.

Diagnoses:

<table>
<thead>
<tr>
<th>Diabetes</th>
<th>Traumatic Brain Injury</th>
<th>Alzheimer’s Disease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parkinson’s Disease</td>
<td>Multiple Sclerosis</td>
<td>Breast Cancer</td>
</tr>
<tr>
<td>Osteoporosis</td>
<td>Muscular Dystrophy</td>
<td>Lung Cancer</td>
</tr>
<tr>
<td>Osteoarthritis</td>
<td>Positive HIV Status</td>
<td>Heart Disease</td>
</tr>
<tr>
<td>Rheumatoid Arthritis</td>
<td>(recent knowledge)</td>
<td>Multiple Myeloma</td>
</tr>
</tbody>
</table>

- Describe each of the following for the diagnosis itself
  - etiology
  - pathology
  - prognosis
  - treatment and lifelong implications

The Presentation Assignment!

Since we all know that the semester is short and the class is long, each learner will be required to “locate” something from the media that relates to the class discussion to be “presented” during one class over the course of the semester. This can be from ANY aspect of the media, preferably something that is on the news or YouTube that can be viewed by the class.

Requirements:
1. find something that can be used in class
2. let the instructor know that you have something that relates to class discussion
   a. send the media clip via email to mecpt@msn.com
   b. identify the media for class prior to the class in which you want to have it used
   c. check with the instructor prior to class to make sure that it was received
3. lead a short discussion about what you found and why you thought that it was worthy of sharing with your classmates and
a. how it relates to topics that are being discussed in class
4. There can be multiple clips per class!
5. Everyone is responsible for ONE over the course of the semester

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**Academic Integrity**

The faculty members of the PTA program at Mercer County Community College believe in the ability of student/learners to succeed honestly, fairly and free from fraud or deception without inappropriate assistance. We also expect that student/learners enrolled in PTA program classes accept responsibility for their own work and exhibit honesty with all submissions of their academic work.

The PTA program faculty members have a zero tolerance policy for failure to abide by this philosophy and will strictly adhere to the College's Academic Integrity Policy which can be found in the MCCC Student Handbook. OMB 210

PTAP Handbook Template Rev 7/2014

Welcome to the Physical Therapist Assistant Program! Thank you for investing the first part of your summer with your classmates and I. The next several semesters will be busy, but hopefully very enjoyable. The faculty members of the PTA program are all looking forward to working with you throughout the coming semesters.

Barbara J. Behrens, PTA, MS
NJ License 40QB00015400
PTA Program Coordinator
Behrensb@mccc.edu