PTAT-2200: PHYSICAL THERAPY IN ACUTE CARE SETTING

Cuyahoga Community College

Viewing: PTAT-2200: Physical Therapy in Acute Care Setting
Board of Trustees:
2017-06-29

Academic Term:
2017-08-24

Subject Code
PTAT - Physical Therapist Assist

Course Number:
2200

Title:
Physical Therapy in Acute Care Setting

Catalog Description:
Explores the procedures, equipment and common pathologies encountered in the practice of physical therapy in the acute care environment. Physical therapy techniques for intervention are also presented, demonstrated and practiced.

Credit Hour(s):
2

Lecture Hour(s):
1.5
Lab Hour(s):
1.5

Requisites
Prerequisite and Corequisite
PTAT-1311 Fundamentals of Physical Therapy, and departmental approval.

I. ACADEMIC CREDIT

Academic Credit According to the Ohio Department of Higher Education, one (1) semester hour of college credit will be awarded for each lecture hour. Students will be expected to work on out-of-class assignments on a regular basis which, over the length of the course, would normally average two hours of out-of-class study for each hour of formal class activity. For laboratory hours, one (1) credit shall be awarded for a minimum of three laboratory hours in a standard week for which little or no out-of-class study is required since three hours will be in the lab (i.e. Laboratory 03 hours). Whereas, one (1) credit shall be awarded for a minimum of two laboratory hours in a standard week, if supplemented by out-of-class assignments which would normally average one hour of out-of-class study preparing for or following up the laboratory experience (i.e. Laboratory 02 hours). Credit is also awarded for other hours such as directed practice, practicum, cooperative work experience, and field experience. The number of hours required to receive credit is listed under Other Hours on the syllabus. The number of credit hours for lecture, lab and other hours are listed at the beginning of the syllabus. Make sure you can prioritize your time accordingly. Proper planning, prioritization and dedication will enhance your success in this course.

The standard expectation for an online course is that you will spend 3 hours per week for each credit hour.

II. ACCESSIBILITY STATEMENT

If you need any special course adaptations or accommodations because of a documented disability, please notify your instructor within a reasonable length of time, preferably the first week of the term with formal notice of that need (i.e. an official letter from the Student Accessibility Services (SAS) office). Accommodations will not be made retroactively.

For specific information pertaining to ADA accommodation, please contact your campus SAS office or visit online at http://www.tri-c.edu/accessprograms. Blackboard accessibility information is available at http://access.blackboard.com.

Eastern (216) 987-2052 - Voice
Metropolitan (216) 987-4344 - Voice
Western (216) 987-5079 - Voice
III. ATTENDANCE TRACKING

Regular class attendance is expected. Tri-C is required by law to verify the enrollment of students who participate in federal Title IV student aid programs and/or who receive educational benefits through other funding sources. Eligibility for federal student financial aid is, in part, based on your enrollment status.

Students who do not attend classes for the entire term are required to withdraw from the course(s). Additionally, students who withdraw from a course or stop attending class without officially withdrawing may be required to return all or a portion of the financial aid based on the date of last attendance. Students who do not attend the full session are responsible for withdrawing from the course(s).

Tri-C is responsible for identifying students who have not attended a course, before financial aid funds can be applied to students’ accounts. Therefore, attendance will be recorded in the following ways:

For in-person courses, students are required to attend the course by the 15th day of the semester, or equivalent for terms shorter than 5-weeks, to be considered attending. Students who have not met all attendance requirements for an in-person course, as described herein, within the first two weeks of the semester, or equivalent, will be considered not attending and will be reported for non-attendance and dropped from the course.

For blended-learning courses, students are required to attend the course by the 15th day of the semester, or equivalent for terms shorter than 5-weeks, or submit an assignment, to be considered attending. Students who have not met all attendance requirements for a blended-learning course, as described herein, within the first two weeks of the semester, or equivalent, will be considered not attending and will be reported for non-attendance and dropped from the course.

For online courses, students are required to login in at least two (2) times per week and submit one (1) assignment per week for the first two (2) weeks of the semester, or equivalent to the 15th day of the term. Students who have not met all attendance requirements for an online course, as described herein, within the first two weeks of the semester, or equivalent, will be considered not attending and will be reported for non-attendance and dropped from the course.

At the conclusion of the first two weeks of a semester, or equivalent, instructors report any registered students who have "Never Attended" a course. Those students will be administratively withdrawn from that course. However, after the time period in the previous paragraphs, if a student stops attending a class, wants or needs to withdraw, for any reason, it is the student’s responsibility to take action to withdraw from the course. Students must complete and submit the appropriate Tri-C form by the established withdrawal deadline.

Tri-C is required to ensure that students receive financial aid only for courses that they attend and complete. Students reported for not attending at least one of their registered courses will have all financial aid funds held until confirmation of attendance in registered courses has been verified. Students who fail to complete at least one course may be required to repay all or a portion of their federal financial aid funds and may be ineligible to receive future federal financial aid awards. Students who withdraw from classes prior to completing more than 60 percent of their enrolled class time may be subject to the required federal refund policy.

If illness or emergency should necessitate a brief absence from class, students should confer with instructors upon their return. Students having problems with class work because of a prolonged absence should confer with the instructor or a counselor.

IV. CONCEALED CARRY STATEMENT

College policy prohibits the possession of weapons on college property by students, faculty and staff, unless specifically approved in advance as a job-related requirement (i.e., Tri-C campus police officers) or, in accordance with Ohio law, secured in a parked vehicle in a designated parking area only by an individual in possession of a valid conceal carry permit.

As a Tri-C student, your behavior on campus must comply with the student code of conduct which is available on page 29 within the Tri-C student handbook, available athttp://www.tri-c.edu/student-resources/documents/studenthandbook.pdfYou must also comply with the College’s Zero Tolerance for Violence on College Property available athttp://www.tri-c.edu/policies-and-procedures/documents/3354-1-20-10-zero-tolerance-for-violence-policy.pdf

Outcomes

Course Outcome(s):

Apply therapeutic foundational concepts and principles to interventions in the acute care cardiopulmonary patient.

Objective(s):

1. Outline common clinical findings and medical surgical management strategies for common cardiac diseases and disorders, coronary artery disease, myocardial infarction, hypertension, congestive heart failure, angina pectoris, and cardiac arrhythmias.
2. Differentiate between obstructive and restrictive lung disease.
3. Discuss the pathophysiology and clinical manifestations of lung diseases frequently encountered in physical therapy.
4. Describe the grades of dyspnea and instruct patient in proper positioning, breathing techniques, and energy conservation techniques to relieve dyspnea.
5. Discuss and demonstrate physical therapy interventions for airway clearance, including assisted coughing and postural drainage techniques.
6. Accurately document sputum production including amount, color, consistency and odor.
7. Recognize various pulmonary procedures and surgeries and the precautions therapists must take following each.
8. Distinguish the parameters for stopping treatment as it relates to vital signs, cardiac status and respiratory status.
9. Identify factors that are associated with or contribute to hypertension.
10. Identify major independent, predisposing, and conditional risk factors for heart disease.
11. Discuss the pathogenesis of arteriosclerosis and atherosclerosis.
12. Recognize precautions therapists must follow with patients following various cardiac procedures and surgeries.
13. Locate and palpate various sites on the human body where an arterial pulse may be taken. Measure and record with accuracy the pulse, including qualities of the pulse.
14. Demonstrate ability to assess orthostatic hypotension by taking and recording blood pressure with patient sitting, standing, and lying down.
15. Identify the primary respiratory organs, inspiratory muscles, and expiratory muscles.
16. Recognize the general manifestations of infectious diseases of the respiratory system.

Course Outcome(s):
Apply therapeutic foundational concepts and principles to interventions in the acute care orthopedic patient.

Objective(s):
1. List the major types of orthopedic diagnoses seen in physical therapy including but not limited to: degenerative joint disease, spinal disorders, and fractures associated with trauma.
2. Identify weight bearing limitations and range of motion restrictions within physician orders.
3. Recognize various equipment needs of patients including braces, orthotics and assistive devices.
4. Identify factors that contribute to bone healing.
5. Describe complications that may arise from fractures and orthopedic surgeries.
6. Recognize total joint arthroplasty surgeries and the precautions following each.
7. Recognize various spinal procedures and the precautions following each.

Course Outcome(s):
Apply therapeutic foundational concepts and principles to interventions in the acute care neurological patient.

Objective(s):
1. Describe common neurological diseases and disorders, such as clinical findings and medical surgical management including but not limited to: traumatic brain injury, spinal cord injury, stroke, subarachnoid hemorrhage, dementia, ventricular dysfunction, and vestibular dysfunction.
2. Identify abnormal lab values in patients at increased risk of stroke.
3. Identify swallowing precautions and diet restrictions to reduce risk of patient aspiration.
4. Discuss measures used to determine level of consciousness and responsiveness.
5. Describe various levels of tone and how it will affect physical therapy treatments.
6. Differentiate between a transient ischemic attach (TIA) and a cerebral vascular accident (CVA).
7. Describe the use of tissue-type plasminogen activator (tPA) and the implications for physical therapy treatment.
8. Identify various types of dementia and physical therapy treatment strategies for them.
9. Describe common degenerative central nervous system diseases, including clinical findings and medical surgical management.
10. Discuss various types of neurosurgery procedures and the effects they will have on patients receiving physical therapy interventions.

Course Outcome(s):
Apply therapeutic foundational concepts and principles to interventions in the acute care oncology patient.

Objective(s):
1. Outline various systemic and localized cancers of the various body systems and their impact on physical therapy intervention.
2. Differentiate between benign and malignant tumors.
3. Identify common sites of metastases and precautions for different sites.
4. Identify risk factors for developing cancer.
5. Identify signs and symptoms of cancer manifestation.
6. Discuss treatment strategies including radiation, chemotherapy, and surgeries and their side effects.
7. Identify screening strategies to detect cancer early.
8. Identify any weight bearing or range of motion limitations post-operatively.
9. Discuss treatment strategies for lymphedema management.
10. Discuss strategies for monitoring exercise progress during lengthy hospital stays.
11. Recognize lab values that will place a patient on reverse isolation precautions.
Course Outcome(s):
Apply therapeutic foundational concepts and principles to interventions in the acute care medical surgical patient.

Objective(s):
1. Diagram a cross section of the skin, identify each layer and discuss the function of skin structures.
2. Classify degrees of burns, and identify and discuss terminology related to burns.
3. Classify the level of tissue damage for the various degrees of burns, the expected healing process and types of grafts.
4. Discuss systemic complications of burn injuries.
5. Differentiate various types of burns including but not limited to: thermal, electrical, and chemical burns.
6. Utilize the appropriate measures to determine percentage of total body surface area burned.
7. Identify various types of wounds including traumatic, surgical, arterial/venous insufficiency, and diabetic ulcers, and describe the pathophysiology of each.
8. Compare wound healing for various types of wounds including traumatic, surgical, arterial/venous insufficiency, and diabetic ulcers, and discuss various modalities used to treat them.
9. Discuss precautions and contraindications for physical therapy treatments including range of motion (ROM) limitations, weight bearing status, and fall risk to maximize the patients healing.
10. Delineate the proper procedure for the application, removal and disposal of dressings.
11. Establish and maintain a sterile field. List the guidelines for maintaining a sterile field.
12. Describe the signs, symptoms, and treatments of gastrointestinal disorders, including but not limited to: esophageal, gastric, intestinal, hepatic, biliary, and pancreatic disorders.
13. Describe signs, symptoms, and treatments of renal system, lower urinary tract, and prostrate dysfunctions and disorders.
14. Identify the various types of organ transplantations and the criteria for obtaining an organ transplant.
15. Discuss the clinical manifestations of organ rejection.
16. Describe the organ transplantation process, including preoperative and post-operative care.
17. Discuss the considerations for treatment, exercise and activity for the patient with organ transplantation.
18. Describe the impact fluid and electrolyte imbalances have on patients in the acute care setting.
19. Identify factors that affect the immune system.
20. Identify the signs and symptoms of infectious disease.
21. Classify the more common types of viral and bacterial infections encountered in the practice of physical therapy.
22. Discuss lifestyle management including the effect role smoking, alcohol intake, and nutrition have on the immune system.
23. Describe signs and symptoms of endocrine system dysfunctions.
24. Differentiate between Type I and Type II Diabetes.
25. Identify signs and symptoms of hypoglycemia and hyperglycemia.

Course Outcome(s):
Apply foundational concepts and principles to the acute care environment.

Essential Learning Outcome Mapping:
Oral Communication: Demonstrate effective verbal and nonverbal communication for an intended audience that is clear, organized, and delivered effectively following the standard conventions of that language.
Written Communication: Demonstrate effective written communication for an intended audience that follows genre/disciplinary conventions that reflect clarity, organization, and editing skills.

Objective(s):
1. Identify patient situations during physical therapy sessions when vital signs should be measured and monitored.
2. List the normal values for vital signs and discuss factors that may alter those values.
3. Describe the actions appropriate for abnormal vital signs.
4. Recognize lab values and vital signs that would contraindicate physical therapy.
5. Take and record with accuracy pulse, blood pressure, and respiratory rate.
6. Identify risk factors for blood clots, treatment for blood clots, and physical therapy management following blood clots.
7. Discuss pharmacological interventions and how medications can affect physical therapy treatment sessions.
8. Identify functional tests to complete with various patient populations and recognize what their outcomes mean.
9. Organize and adjust lines, tubes, and equipment to minimize risks to patient during therapy session.
10. Identify and discuss the various lines and catheters including but not limited to: peripheral IV lines, central lines, urinary catheters, ostomy pouch systems, and rectal tubes.
12. Identify the various types of room isolation and specific precautions for each.
14. Identify psychological and psychosocial impacts on patients including but not limited to: fear of falling, Intensive Care Unit (ICU) psychosis, delirium, and substance abuse and withdrawal.
15. Discuss the unique characteristics and requirements of patients in the acute care setting.
16. Interview patient and caregiver to obtain pertinent subjective information related to the current therapy session.
17. Identify appropriate conversations to have within the physical therapist/physical therapist assisting (PT/PTA) team including requests for plan of care updates, need for a reevaluation, and updates to discharge recommendations.
18. Perform thorough review of patient medical record prior to physical therapy intervention.
19. Interpret findings in the physical therapy evaluation and medical record to create physical therapy interventions appropriate to progress patients in the acute care environment.
20. Produce timely and accurate documentation for patient interactions in the acute care environment.
21. Demonstrate competence in the reading and interpretation of professional literature, specific to the acute care setting.
22. Discuss the requirements for providing physical therapy interventions in the acute care setting including the ability to treat medically complex patients.
23. Discuss the need for interdepartmental team approach in the acute care.
24. Make use of the foundational elements of patient interaction with all simulated patient interactions.
25. Document patient treatment in subjective, objective, assessment, plan (SOAP) note format with increased accuracy and efficiency.

Methods of Evaluation:
1. Written exams and quizzes
2. Laboratory skill checks
3. Written assignments
4. Practical laboratory exams
5. Oral presentations

Course Content Outline:
1. Acute care environment.
   a. ICU Therapy
   b. Lines & tubes
   c. Contraindications to therapy
   d. Room setup and organization
   e. Pharmacological intervention
   f. Laboratory values
   g. Functional testing for acutely ill patients
   h. Patient interview
   i. Discharge planning
   j. Patient education
   k. Documentation
   l. Mobilizing bariatric patients
   m. Post-surgical diabetic patients
2. Cardiac system
   a. Surgeries and procedures
   b. Measurement of vital signs to determine treatment
   c. Arrhythmias
   d. Sternal precautions
   e. Angina, myocardial infarction (MI), congestive heart failure (CHF), left ventricular assistive device (LVAD) and myopathy
   f. Aneurysm
3. Pulmonary System
   a. Breathing techniques, exercises and assisted coughing
   b. Surgeries and procedures
   c. Postural drainage
   d. Grades of dyspnea and positioning
   e. Obstructive and restrictive lung disease
   f. Pneumonia
4. Musculoskeletal system
   a. Surgical procedures and equipment
   b. Transfers and bed mobility
   c. Weight bearing, precautions, and range of motion (ROM) limitations
   d. Total joint replacement surgery-acute post-op considerations
   e. Spine surgery
   f. Trauma
5. Vascular system
   a. Blood clots and pulmonary embolisms
   b. Surgical interventions and amputations
6. Neurological system
a. Swallowing precautions and diet restrictions
b. Cognitive changes and dysfunction
c. Various neurosurgery procedures and precautions
d. Cerebrospinal fluid (CSF) and intracranial pressure (ICP)

7. Oncology
   a. Lymphedema management
   b. Protective precautions
   c. Chemotherapy, radiation, and stem cell transplants
   d. Metastatic disease

8. Infectious disease
   a. Isolation
   b. Standard precautions
   c. Bacterial infections including resistant strains
   d. Viral infections

9. Organ Transplantation
   a. Types of surgeries
   b. Types of organ rejection
   c. Criteria for organ recipient to qualify for transplant

10. Fluid and electrolyte imbalances
    a. Hyponatremia and hypernatremia
    b. Dehydration and hypervolemia
    c. Electrolyte imbalances

11. Burns and wounds
    a. Total body surface area burn measurement tools
    b. Healing strategies
    c. Systemic complications
    d. Weight bearing and ROM limitations
    e. Treatment strategies

12. Gastrointestinal and genitourinary systems
    a. Surgeries and procedures
    b. Abdominal splinting
    c. Incontinence

Resources


Resources Other

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