



GEORGIA

PEACH STATE PATHWAYS

Career, Technical, & Agricultural Education

HEALTHCARE SCIENCE

COURSE: 25.525 General Medicine

UNIT: 9.4 Physical and Occupational Therapy Services

SUB UNIT: Lymphatic System



INTRODUCTION

Annotation:

In this subunit students will demonstrate understanding of and perform advanced technical skills in Lymphatic system care as it relates to Physical Therapy. The Unit will include research into diseases, disorders, or trauma to the Lymphatic system that might cause a need for the services provided by Physical Therapy. The students will research a lymphatic system disease or disorder.

Grade(s):

<input type="checkbox"/>	9 th
<input type="checkbox"/>	10 th
<input checked="" type="checkbox"/>	11 th
<input checked="" type="checkbox"/>	12 th

Time: Two 50 minute class periods

Author: Pat Rape, BSRT (R), MEd

Additional Author(s):

Students with Disabilities:

For students with disabilities, the instructor should refer to the student's IEP to be sure that the accommodations specified are being provided. Instructors should also familiarize themselves with the provisions of Behavior Intervention Plans that may be part of a student's IEP. Frequent consultation with a student's special education instructor will be beneficial in providing appropriate differentiation.



FOCUS STANDARDS

GPS Focus Standards:

HS-TGM-10. Students will demonstrate understanding of and perform advanced technical skills in musculoskeletal system care – Physical Therapy and Orthopedics.

- a. Describe management of clients with immobilization devices.
- b. Set up clients correctly in special devices for promoting mobility and circulation.
- c. Demonstrate techniques for applying anti-embolic hose to extremities.
- d. Demonstrate the care and use of prosthetic and orthotic devices.

HS-TGM-8. Students will understand and utilize terminology related to the human anatomy.

- g. Utilize diagnostic, surgical, and procedural terms and abbreviations related to the lymphatic system.

HS-TGM-5. Students will understand the importance of and demonstrate data collection as it relates to the goals, objectives, and implementation of the treatment plan according to their scope of practice.

- a. Observe, record, and report client behavior.
- b. Assist treatment team in observing, reporting, and recording client healthcare needs, strengths, and problems.
- c. Follow policies and protocols of the facility.
- d. Understand and demonstrate all necessary interventions of the patient treatment plan as it relates to their scope of practice.
- e. Examine and demonstrate the importance of client collaboration and acceptance in identifying and implementing appropriate interventions in the treatment plan.
- f. Assist in identifying potential educational needs.

GPS Academic Standards:

ELA9RL. The student understands and acquires new vocabulary and uses it correctly in reading and writing.

SAP2. Students will analyze the interdependence of the integumentary, skeletal and muscular systems as these relate to the protection, support and movement of the human body

National / Local Standards / Industry / ISTE:



UNDERSTANDINGS & GOALS

Enduring Understandings:

Patients may have disorders of the lymphatic system that may require interventions through the use of special equipment to promote circulation or therapeutic measures by PT & OT. It is important for the multiskilled healthcare worker to understand their role in managing patients with special devices and treatment plans.

Essential Questions:

- How do I assist the healthcare team in providing care for clients with lymphatic system disorders?
- How do I manage various devices used in caring for clients with lymphatic disorders?

Knowledge from this Unit: The student will know:

- Anatomy and physiology of the lymphatic system
- Diseases, disorders, and injuries affecting the lymphatic system that may require special equipment
- How to follow treatment plan and use tools in providing care for clients/patients with disorders of the lymphatic system
- Types of devices used to manage patients with edema or lymphedema

Skills from this Unit: The student will be able to:

- Research and report diseases, disorders, or trauma to the lymphatic system
- Demonstrate techniques for applying elastic stockings.
- Report observations and procedure completion



ASSESSMENT(S)

Assessment Method Type: Select one or more of the following. Please consider the type(s) of differentiated instruction you will be using in the classroom.

- ☐ Pre-test
- ☐ Objective assessment - multiple-choice, true- false, etc.
- ☐ Quizzes/Tests
- ☐ Unit test
- ☐ Group project
- ☒ Individual project
- ☒ Self-assessment - May include practice quizzes, games, simulations, checklists, etc.
- ☐ Self-check rubrics

- _____ ☒ Self-check during writing/planning process
- _____ ☐ Journal reflections on concepts, personal experiences and impact on one's life
- _____ ☐ Reflect on evaluations of work from teachers, business partners, and competition judges
- _____ ☐ Academic prompts
- _____ ☐ Practice quizzes/tests
- _____ Subjective assessment/Informal observations
- _____ ☐ Essay tests
- _____ ☐ Observe students working with partners
- _____ ☐ Observe students role playing
- _____ Peer-assessment
- _____ ☐ Peer editing & commentary of products/projects/presentations using rubrics
- _____ ☐ Peer editing and/or critiquing
- _____ Dialogue and Discussion
- _____ ☐ Student/teacher conferences
- _____ ☐ Partner and small group discussions
- _____ ☐ Whole group discussions
- _____ ☐ Interaction with/feedback from community members/speakers and business partners
- _____ Constructed Responses
- _____ ☐ Chart good reading/writing/listening/speaking habits
- _____ ☒ Application of skills to real-life situations/scenarios
- _____ Post-test

Assessment(s) Title:

Lab: Applying Elastic Stockings

Oral Report on Research and report of diseases, disorders, or trauma to the lymphatic system

Assessment(s) Description/Directions:

1. Lab: Applying Elastic Stockings can be assigned with a demonstration lab or multimedia presentation, make copies of the lab for each student.
2. Oral Report Assignment Rubric (copy 1 for each student) Assign and give time to work in class.

Attachments for Assessment(s): Please list.

Lab: Applying Elastic Stockings

Oral Report Rubric



LEARNING EXPERIENCES

Instructional planning: Include lessons, activities and other learning experiences in this section with a brief description of the activities to ensure student acquisition of the knowledge and skills addressed in the standards. Complete the sequence of instruction for each lesson/task in the unit.

Sequence of Instruction

1. Identify the Standards. Standards should be posted in the classroom for each lesson.

HS-TGM-10. Students will demonstrate understanding of and perform advanced technical skills in musculoskeletal system care – Physical Therapy and Orthopedics.

2. Review Essential Questions.

- How do I assist the healthcare team in providing care for clients with lymphatic system disorders?
- How do I manage various devices used in caring for clients with lymphatic disorders?

3. Identify and review the unit vocabulary.

Lymphatic system

4. Assessment Activity. Review/Lecture on Lymphatic System –Since this system is taught in the applications course, a KWL chart may be helpful to review lymphatic system anatomy.

5. Assign Oral Report on Diseases of the Lymphatic System (allow research time)

6. Use link to show students information about lymphedema management

http://www.kitsappt.com/Specialties/program_lympedema.htm

Assign Lab: Applying Elastic Stockings

Attachments for Learning Experiences: Please list.

- Lab : Applying Elastic Stockings
- Rubric: Oral Presentation of Research Report
- List of vocabulary words for Lymphatic System

Notes & Reflections:

Elastic Stockings may be applied to the manikin; having enough supplies for all students to work at the same time might be a problem (plain long knee socks might be substituted if necessary)



CULMINATING PERFORMANCE TASK (Optional)

Culminating Unit Performance Task Title:

1. Lab: Applying Elastic Stockings
2. Oral Report Rubric for Research of a Lymphatic system disease, Disorder, or Trauma

Culminating Unit Performance Task Description/Directions/Differentiated Instruction:

The report on the Lymphatic System Disease, Disorder, or Trauma can be presented in a number of ways and the students can be allowed choices of how to present the information.

Attachments for Culminating Performance Task: Please list.

1. Lab: Applying Elastic Stockings
2. Oral Report Rubric on Research Lymphatic Disease, Disorder, or Trauma Rubric



UNIT RESOURCES

Web Resources:

http://www.kitsappt.com/Specialties/program_lympedema.htm

<http://www.lymphnet.org/aboutNLN/wholsNLN.htm>

<http://www.medsolupplier.com/lymphguide.html>

<http://www.youtube.com/watch?v=t1tSiTcFXsw>

<http://www.mayoclinic.com/health/lymphedema/DS00609/DSECTION=treatments-and-drugs>

Attachment(s):

The You Tube above shows a massage of the upper arm and chest for lymphedema. She mentions a massage for the legs but does not demonstrate it. It could be showed with a demonstration of applying the stockings.

Materials & Equipment:

- A copy of the labs and report rubric for each student
- Projector,
- Access to internet,
- Elastic stockings in various lengths,
- Chart for measuring a patient for elastic stockings; if have access to sleeve for lymph

What 21st Century Technology was used in this unit:

<input checked="" type="checkbox"/>	Slide Show Software
<input checked="" type="checkbox"/>	Interactive Whiteboard
<input type="checkbox"/>	Student Response System
<input type="checkbox"/>	Web Design Software
<input type="checkbox"/>	Animation Software
<input type="checkbox"/>	Email

<input type="checkbox"/>	Graphing Software
<input type="checkbox"/>	Calculator
<input checked="" type="checkbox"/>	Desktop Publishing
<input type="checkbox"/>	Blog
<input type="checkbox"/>	Wiki
<input type="checkbox"/>	Website

<input type="checkbox"/>	Audio File(s)
<input type="checkbox"/>	Graphic Organizer
<input checked="" type="checkbox"/>	Image File(s)
<input type="checkbox"/>	Video
<input type="checkbox"/>	Electronic Game or Puzzle Maker