



HEALTHCARE SCIENCE

COURSE: 25.552 Applications of Therapeutic Services

UNIT: 19.1 Urinary System



INTRODUCTION

Annotation:

In this unit students will learn the functional process of the urinary system and its importance in waste removal as well as goals of treatment/prevention of disease processes and interdependence on other body systems.

Grade(s):

X	9 th
X	10 th
X	11 th
X	12 th

Time:

Five 50 minute periods

Author:

- Libbye Sills, RN, Med
- Phyllis Dumas, RN

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-ATS-8:

The student will analyze the anatomy, physiology and basic pathophysiology of each of the body's systems and apply knowledge in performance of evaluating, monitoring, and treatment of client(s) and/or simulations.

- a. Analyze anatomical structures in relationship to their physiological functions.
- b. Analyze the interdependence of the integumentary, skeletal, and muscular systems as these relate to the protection, support and movement of the human body.
- c. Analyze the interdependence of the body's systems as related to wellness, disease, and disorders.
- d. Discuss the goals of therapy and care rehabilitation.
- e. Discuss the etiology of two common diseases in each body system and how to treat and/or prevent them.

GPS Academic Standards:

National / Local Standards / Industry / ISTE:



UNDERSTANDINGS & GOALS

Enduring Understandings:

- The name and function of urinary system structures
- The role of the urinary system and its interdependence on other body systems and
- How diseases/disorders affect the urinary system and are treated

Essential Questions:

- How does the urinary system affects the body's ability to function?
- What is the role of each anatomical structure of the urinary system?

Knowledge from this Unit:

- The independent functioning of the urinary system.
- The interdependence of urinary system with other body systems.
- The common disease processes within the urinary system.
- The common goal of treatment/prevention for disease processes

Skills from this Unit:



ASSESSMENT(S)

Assessment Method Type:

- ☐ 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:

Urinary System Quiz

Assessment(s) Description/Directions:

Give students the quiz at the end of lessons. Students will need to draw and label the urinary system on the quiz.

Attachments for Assessment(s):



LEARNING EXPERIENCES

Sequence of Instruction

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

2. Review Essential Questions.

- How does the urinary system affects the body's ability to function?
- What is the role of each anatomical structure of the urinary system?

3. Identify and review the unit vocabulary.

4. Assessment Activity.

Teaching Activities:

- a) Interactive lecture w/ multi-media presentation ([link here](#))
- b) Urinary system color plate
- c) Calculations worksheet
- d) Intake & output flow sheet

Student activities:

- a) Define key terms
- b) Complete color plate
- c) [Interactive lecture notes](#)
- d) Complete intake & output worksheets from textbook
- e) Review sheets

Attachments for Learning Experiences:

Notes & Reflections:

The use of color plates from anatomy & physiology coloring books are helpful to learn labeling of all the parts; students can also draw an illustration of the urinary system and label it. You may go into the measurement of intake & output with this lecture, but that is optional.



CULMINATING PERFORMANCE TASK (Optional)

Culminating Unit Performance Task Title:

Intake & Output flow sheets

Culminating Unit Performance Task Description/Directions/Differentiated

Students will learn to measure output and correctly record intake and output on flow sheets

Attachments for Culminating Performance Task



UNIT RESOURCES

Web Resources:

- http://www.betterhealth.vic.gov.au/bhcv2/bhcArticles.nsf/pages/Quiz_The_urinary_system?OpenDocument This is an interactive online review quiz students can take on the urinary system and find out how many questions they answered correctly and also find out the correct answers to any missed questions.
- <http://www.innerbody.com/image/urinov.html> This is an interactive site where students can review the urinary system structures and function.
- http://training.seer.cancer.gov/module_anatomy/unit11_4_quiz_dd_01.html This is an interactive site where students can practice labeling the diagram of the urinary system.

Attachment(s):

Materials & Equipment:

- Textbook
- Multi-media presentation
- Worksheets
- Color plates
- Review sheets
- Quiz

What 21st Century Technology was used in this unit:

<input type="checkbox"/>	Slide Show Software	<input type="checkbox"/>	Graphing Software	<input type="checkbox"/>	Audio File(s)
<input type="checkbox"/>	Interactive Whiteboard	<input type="checkbox"/>	Calculator	<input type="checkbox"/>	Graphic Organizer
<input type="checkbox"/>	Student Response System	<input type="checkbox"/>	Desktop Publishing	<input type="checkbox"/>	Image File(s)
<input type="checkbox"/>	Web Design Software	<input type="checkbox"/>	Blog	<input type="checkbox"/>	Video
<input type="checkbox"/>	Animation Software	<input type="checkbox"/>	Wiki	<input type="checkbox"/>	Electronic Game or Puzzle Maker
<input type="checkbox"/>	Email	<input checked="" type="checkbox"/>	Website		