



## HEALTHCARE SCIENCE

**COURSE:** Healthcare Science

**UNIT 4:** Introduction to Nursing

### INTRODUCTION

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**Annotation:**

This unit will inform students of the broad and growing field of nursing. It covers the types of nurses, their salaries, skills, educational requirements, etc.

**Grade(s):**

<input type="checkbox"/>	6 <sup>th</sup>
<input type="checkbox"/>	7 <sup>th</sup>
<input checked="" type="checkbox"/>	8 <sup>th</sup>

**Time:** Five 50 minute class periods

**Author:**

CTAE Resource Network

**Additional Author(s):**

Caleb Allred, Dallas Duncan and Dr. Frank Flanders

**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 appropriately. 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. Many students (both with and without disabilities) who struggle with reading may benefit from the use of text reading software or other technological aids to provide access to printed materials. Many of these are available at little or no cost on the internet.

# FOCUS STANDARDS

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## **GPS Focus Standards:**

### **MSHS8-HS-4**

Students will assess the career pathways available in the nursing field.

- a) Compare and contrast the roles and responsibilities of registered nurses, licensed practical nurses, and nursing assistants, along with their education and training requirements, salary ranges, job outlooks, and facilities in which they work.
- b) Describe the personal characteristics, attitudes, and rules of appearance that apply to individuals in nursing careers.
- c) Describe how social, religious, ethnic, and cultural beliefs impact patient care.
- d) Identify moral and ethical issues impacting nursing care.
- e) Evaluate the roles of advanced practice nurses (e.g., nurse practitioners, nurse anesthetists).
- f) Perform vision screening and colorblindness screening.
- g) Sample tasks: Demonstrate at least one of the following:
  - Measuring and recording of height and weight.
  - Measuring and recording of TPR (temperature, pulse, and respiration).
  - Measuring and recording of blood pressure.
  - Graphing of vital signs.
  - Formulation of a discharge plan.
  - Measuring oral fluid intake.
  - Provision of patient education.

## **GPS Academic Standards:**

### **S8CS4**

**Students will use tools and instruments for observing, measuring, and manipulating equipment and materials in scientific activities utilizing safe laboratory procedures.**

### **S8CS5**

**Students will use the ideas of a system, model, change, and scale in exploring scientific and technological matters.**

### **S8CS6**

**Students will communicate scientific ideas and activities clearly.**

### **M8P1**

**Students will solve problems (using appropriate technology).**

### **M8P3**

**Students will communicate mathematically.**

### **M8P5**

**Students will represent mathematics in multiple ways.**

### **National / Local Standards / Industry / ISTE:**

- 1.33** Apply mathematical principles involving temperature, weights, and measures used in the healthcare delivery system.
- 1.35** Analyze diagrams, charts, graphs, and tables to interpret healthcare results.
- 4.11** Classify the personal traits or attitudes desirable in a member of the healthcare team.
- 4.12** Summarize basic professional standards of the healthcare workers as they apply to hygiene, dress, language, confidentiality and behavior (i.e. courtesy and self-introductions).
- 4.22** Exemplify professional characteristics.
- 4.31** Compare potential health science career pathways using a variety of health careers within the diagnostic services, therapeutic services, health informatics services, support services, or biotechnology research and development.
- 4.32** Recognize levels of education, credentialing requirements, employment opportunities, workplace environments, and career growth potential for a service area.
- 4.43** Demonstrate respectful and empathetic interactions with diverse age, cultural, economic, ethnic, and religious groups in various settings.
- 5.15** Apply procedures for accurate documentation and record keeping.
- 6.14** Recognize ethical issues and their implications related to healthcare.
- 6.21** Apply ethical behaviors including honesty and integrity in a healthcare setting.
- 6.31** Understand religious and cultural values as they impact healthcare services.
- 9.12** Describe strategies for the prevention of diseases including health screenings and examinations.
- 10.11** Apply procedures for measuring and recording vital signs including the normal ranges.

## **UNDERSTANDING & GOALS**

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### **Enduring Understandings:**

Nursing is an important, growing field that encompasses more than just working in a hospital. Nurses require extensive knowledge of science and medicine and have people skills to help them relate to patients.

### Essential Questions:

- Why do we need nurses?
- What are a nurse's duties and responsibilities?
- Where do nurses work?
- What types of nurses are there?
- What skills do nurses need?

### Knowledge from this Unit:

Students will:

- Discuss the different types of nursing positions.
- Evaluate the future demand for nurses.
- Identify key historical events and people involved in the field of nursing.

### Skills from this Unit:

Students will:

- Demonstrate one or more of the skills associated with nursing.

## ASSESSMENTS

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**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 and 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:**

**Assessment(s) Description/Directions:**

**Attachments for Assessment(s):**

## LESSON PLANS

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### • INTRODUCTION

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

**MSHS8-HS-4**

Students will assess the career pathways available in the nursing field.

- a) Compare and contrast the roles and responsibilities of registered nurses, licensed practical nurses, and nursing assistants, along with their education and training requirements, salary ranges, job outlooks, and facilities in which they work.
- b) Describe the personal characteristics, attitudes, and rules of appearance that apply to individuals in nursing careers.
- c) Describe how social, religious, ethnic, and cultural beliefs impact patient care.
- d) Identify moral and ethical issues impacting nursing care.
- e) Evaluate the roles of advanced practice nurses (e.g., nurse practitioners, nurse anesthetists).
- f) Perform vision screening and colorblindness screening.
- g) Sample tasks: Demonstrate at least one of the following:
  - Measuring and recording of height and weight.
  - Measuring and recording of TPR (temperature, pulse, and respiration).
  - Measuring and recording of blood pressure.
  - Graphing of vital signs.
  - Formulation of a discharge plan.

- Measuring oral fluid intake.
- Provision of patient education.

<b><u>S8CS4</u></b>	<b>Students will use tools and instruments for observing, measuring, and manipulating equipment and materials in scientific activities utilizing safe laboratory procedures.</b>
<b><u>S8CS5</u></b>	<b>Students will use the ideas of a system, model, change, and scale in exploring scientific and technological matters.</b>
<b><u>S8CS6</u></b>	<b>Students will communicate scientific ideas and activities clearly.</b>
<b><u>M8P1</u></b>	<b>Students will solve problems (using appropriate technology).</b>
<b><u>M8P3</u></b>	<b>Students will communicate mathematically.</b>
<b><u>M8P5</u></b>	<b>Students will represent mathematics in multiple ways.</b>
<b><u>1.33</u></b>	<b>Apply mathematical principles involving temperature, weights, and measures used in the healthcare delivery system.</b>
<b><u>1.35</u></b>	<b>Analyze diagrams, charts, graphs, and tables to interpret healthcare results.</b>
<b><u>4.11</u></b>	<b>Classify the personal traits or attitudes desirable in a member of the healthcare team.</b>
<b><u>4.12</u></b>	<b>Summarize basic professional standards of the healthcare workers as they apply to hygiene, dress, language, confidentiality and behavior (i.e. courtesy and self-introductions).</b>
<b><u>4.22</u></b>	<b>Exemplify professional characteristics.</b>
<b><u>4.31</u></b>	<b>Compare potential health science career pathways using a variety of health careers within the diagnostic services, therapeutic services, health informatics services, support services, or biotechnology research and development.</b>
<b><u>4.32</u></b>	<b>Recognize levels of education, credentialing requirements, employment opportunities, workplace environments, and career growth potential for a service area.</b>
<b><u>4.43</u></b>	<b>Demonstrate respectful and empathetic interactions with diverse age, cultural, economic, ethnic, and religious groups in various settings.</b>
<b><u>5.15</u></b>	<b>Apply procedures for accurate documentation and record keeping.</b>
<b><u>6.14</u></b>	<b>Recognize ethical issues and their implications related to healthcare.</b>
<b><u>6.21</u></b>	<b>Apply ethical behaviors including honesty and integrity in a healthcare setting.</b>
<b><u>6.31</u></b>	<b>Understand religious and cultural values as they impact healthcare services.</b>
<b><u>9.12</u></b>	<b>Describe strategies for the prevention of diseases including health screenings and examinations.</b>

## **10.11**

### **Apply procedures for measuring and recording vital signs including the normal ranges.**

#### 2. Review Essential Questions.

- Why do we need nurses?
- What are a nurse's duties and responsibilities?
- Where do nurses work?
- What types of nurses are there?
- What skills do nurses need?
- Who are some key people involved in the history of nursing?
- What historical events changed the field of nursing?

#### 3. Identify and review the unit vocabulary.

Apothecary	Exorcism	Nurse Midwife	Registered Nurse
Belladonna	Licensed Practical Nurse	Nurse Practitioner	
Clinical Nurse Specialist	Morphine	Nursing Assistant	
Digitalis	Nurse Anesthetist	Quinine	

### **• LESSON 1: DEMAND AND OUTLOOK**

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#### 1. Review Essential Questions. Post Essential Questions in the classroom.

- Why do we need nurses?
- Where do nurses work?

#### 2. Lead a brief discussion about students who know nurses.

- Ask students, "Do you know any nurses?"
- Where do they work?
- What do they do on a daily basis?

#### 3. Tell students about the need and outlook for nurses.

- The healthcare field is one of the fastest growing career fields.
- The demand for qualified nurses is at an all-time high.
- It is projected that more than 500,000 new jobs will be generated by registered nurses—among the largest numbers for new jobs in any occupation.
- Still, experts are predicting that by 2020, there may be a shortage of as many as 434,000 nurses in the United States alone.

#### 4. Incorporate Math Activity

- Have students complete the **Nursing Salary Math Connection**.
  - See attached supplementary files

5. **Optional:** Show students the **Introduction to Nursing** PowerPoint.
  - See attached supplementary files

## • LESSON 2: TYPES OF NURSES AND EDUCATION

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1. Review Essential Questions. Post Essential Questions in the classroom.
  - What types of nurses are there?
  - What are a nurse's duties and responsibilities?
  - Who are some key people involved in the history of nursing?
  - What historical events changed the field of nursing?
2. Ask students, "What is required to become a nurse?"
3. Show the **Careers in Nursing** PowerPoint presentation.
  - See attached supplementary files.
  - During the PowerPoint, discuss which type of nursing interests students most.
  - Discuss the differences between types of nursing.
4. **Optional:** Show students the **History of Healthcare** PowerPoint.
  - See attached supplementary files.
  - Discuss the key historical events and people during the PowerPoint.

## • LESSON 3: SKILLS

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1. Review Essential questions. Post Essential Questions in the classroom.
  - What are a nurse's duties and responsibilities?
  - What skills do nurses need?
2. Ask students, "What skills do you think a nurse needs?"
  - Nurses must be able to do things such as measure and record patient information, graph vital signs, assist doctors with treatment, etc. Discuss the importance of carefully following procedures.
3. Demonstrate one or more of the following tasks:
  - Measuring and recording of height and weight.
  - Measuring and recording of TPR (temperature, pulse, and respiration).
  - Measuring and recording of blood pressure.
  - Graphing of vital signs.
  - Formulation of a discharge plan.
  - Measuring oral fluid intake.
  - Provision of patient education.



4. If appropriate, have students, either individually or in groups, complete one or more of the above tasks.

**Attachments for Learning Experiences:**

[Nursing Salary Math Connection](#)

[Introduction to Nursing](#)

[Careers in Nursing](#)

[History of Health Care](#)

**Notes & Reflections:**

## CULMINATING PERFORMANCE TASK

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**Culminating Unit Performance Task Title:**

**Culminating Unit Performance Task Description/Directions/Differentiated Instruction:**

**Attachments for Culminating Performance Task:**

## UNIT RESOURCES

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**Web Resources:**

<http://www.discovernursing.com/>

**Attachment(s):**

**Materials & Equipment:**

**What 21st Century Technology was used in this unit:**

<input checked="" 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 type="checkbox"/>	Website		