



## HEALTHCARE SCIENCE

**COURSE:** 25.561 Nursing Essentials

**UNIT:** 20.1 Vital Signs



## INTRODUCTION

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**Annotation:**

In this unit students will review the principles of vital signs monitoring and apply their skills in working with clients in a clinical/facility setting. They will be expected to accurately measure vital signs using manual equipment and equipment used at the training site. Vital signs are a skill that must be mastered for students to become certified as nursing assistants.

**Grade(s):**

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

**Time:**

Two 50 minute periods and a visit to a training site

**Author:**

Pat Rutherford, RN EdS

**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

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## **GPS Focus Standards:**

### **HS-NE-12:**

The student will perform basic nursing skills within the scope of practice for a nursing assistant while maintaining resident/patient/client rights. Beginning and ending procedures (i.e. wash your hands, gather equipment, identify the client, provide for privacy, etc.) will be performed with all resident/patient/client care.

### **HS-NE-12-a:**

Measure and record vital signs including blood pressure using a manual and electronic equipment.

## **GPS Academic Standards:**

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



## UNDERSTANDINGS & GOALS

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### **Enduring Understandings:**

- The importance of accurately measuring and recording vital signs including blood pressure using manual and electronic equipment while in the classroom and clinical areas.

### **Essential Questions:**

- Why are vital signs “vital”?
- How do I accurately measure, report and record vital signs in class and at a clinical site?

### **Knowledge from this Unit:**

- Recognize normal limits of all vital signs and record and report appropriately.
- Follow facility guidelines for recording and obtaining vital signs.
- Recognize when equipment is faulty and appropriate steps to take

### **Skills from this Unit:**

- Accurately measure vital signs, record and report results in the classroom and at a clinical site.
- Identify measurements that are outside the normal range, follow procedure for reporting and recording in classroom and at a clinical site
- Recognize faulty equipment and take appropriate corrective actions



## ASSESSMENT(S)

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### 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

### Assessment(s) Title:

Vital Signs Test

### Assessment(s) Description/Directions:

### Attachments for Assessment(s):



# LEARNING EXPERIENCES

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## Sequence of Instruction

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

HS-NE-12: The student will perform basic nursing skills within the scope of practice for a nursing assistant while maintaining resident/patient/client rights. Beginning and ending procedures (i.e. wash your hands, gather equipment, identify the client, provide for privacy, etc.) will be performed with all resident/patient/client care.

HS-NE-12-a. Measure and record vital signs including blood pressure using a manual and electronic equipment.

### 2. Review Essential Questions.

- Why are vital signs “vital”?
- How do I accurately measure, report and record vital signs in class and at a clinical site?

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

### 4. Assessment Activity.

- Review Vital Signs
- Have student practice taking vital signs of classmates and or staff and record on sheet. Student should record at least 3 different people’s vital signs each day while in class. Maintaining confidentiality as needed.
- Student Final Vital Signs Check Off to be performed before going to clinical setting with a 100% accuracy + or – 2 points of evaluator
- Students should be able to incorporate all 4 procedures and perform sequentially.

## Attachments for Learning Experiences:

## Notes & Reflections:

This lesson is connected to the Application of Therapeutic Services lesson plan for Vital Signs. Most of the lesson will be reinforced learning and use of skills in a clinical setting.



## CULMINATING PERFORMANCE TASK (Optional)

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### Culminating Unit Performance Task Title:

Vital Signs Check Off

### Culminating Unit Performance Task Description/Directions/Differentiated

Students measurements must be within + or – 2 points of evaluator

### Attachments for Culminating Performance Task



## UNIT RESOURCES

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### Web Resources:

### 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		

## Vital Signs Test

Name \_\_\_\_\_

Fill in the blank

1. The measurement of balance of heat lost and heat gain is \_\_\_\_\_.
2. Pulse is defined as the pressure of the \_\_\_\_\_ pushing against the wall of a \_\_\_\_\_.
3. A pulse site in the side of the neck is called the \_\_\_\_\_.
4. A pulse rate over 100 BPM is called \_\_\_\_\_.
5. A pulse described as regular or irregular by its \_\_\_\_\_.
6. The most accurate method for taking a temperature is \_\_\_\_\_.
7. Constant pressure of the wall of the arteries is called \_\_\_\_\_.
8. The ratio for chest compressions and \_\_\_\_\_ for CPR is \_\_\_\_\_ to \_\_\_\_\_.
9. The depth of compressions on an adult victim should be \_\_\_\_\_ to \_\_\_\_\_.
10. Another name for fever is \_\_\_\_\_.
11. A blood pressure above 140/90 is called \_\_\_\_\_.
12. The normal range for oral body temperature is \_\_\_\_\_ -- \_\_\_\_\_.
13. The normal range for pulse is \_\_\_\_\_ -- \_\_\_\_\_.
14. The normal range for respirations is \_\_\_\_\_ -- \_\_\_\_\_.
15. The normal range for Blood pressure is \_\_\_\_\_ -- \_\_\_\_\_.

# Vital Signs Practice Recording Sheet

Record V/S taken while practicing the skills needed to be accurate

[illegible]




### T P R B/P Final Check-Off List

Name \_\_\_\_\_

Date \_\_\_\_\_

<b>Task</b>	<b>Possible Points</b>	<b>Practice Points</b>	<b>Points Earned Yes/No</b>	<b>Comments</b>
<b><i>Gather Equipment</i></b>				
Watch, stethoscope, B/P cuff, alcohol pad, pen & paper	6			
Wash Hands	2			
Identify Patient & self to patient	2			
Explain Procedure – taking V/S	2			
<b>Temperature – Oral – Electronic</b>				
Pull probe out of device & place cover over probe correctly	2			
Question pt. if drank, ate or smoked anything in last 15 minutes	2			
Instruct pt. to open mouth, place probe under tongue	2			
Instruct pt close mouth and not to bite robe	2			
Hold probe in place until beep is heard, then ask pt to open mouth	2			
Remove probe & throw away cover	1			
Record the reading	3			

Replace probe into device	2			
Pulse – Radial				
Locate pulse thumb side of wrist with 2 fingers & wrist side down	2			
Support wrist	2			
Count 1 full minute – remember rate, rhythm	4			
Leave hand in place to count respiratory rate so pt. is unaware of counting	4			
<b>Respiration</b>				
Count 1 full minute while leaving hand at wrist site	2			
Record both Pulse & Respiratory Rates with description of each (= or – 2 points)	4			
<b>Blood Pressure</b>				
Select the correct size of cuff	2			
Clean earpiece & diaphragm of stethoscope - Place in position, (not in ears at this time)	4			
Place cuff on arm 1 inch above the antecubital space	2			
Fasten with the Velcro, Meter correct angle	1			
Support arm while measuring B/P	2			

Locate the brachial pulse with 2 fingers	2			
Place stethoscope in ears correctly; earpieces should be pointed forward	1			
Place diaphragm of stethoscope over the brachial pulse site, hold in place with fingers	2			
Place bulb of cuff in hand correctly & turn the valve to the right the, not too tight	2			
Make sure the tubing is not tangled so that it does not mask the "pulse" sounds	2			
Begin to pump cuff to 150mmHg or 20 points above the previous reading	2			
Slowly releases valve	2			
Recognize systolic & diastolic sounds & record on paper (+or – 2 points)	6			
Recalls normal ranges for temperature	5			
Recalls normal ranges for pulse	5			
Recalls normal ranges for respiration	5			
Recalls normal ranges for B/P	5			
Clean & replaces all equipment	2			
Washes Hands &	1			

Report abnormal findings	1			
<b>Total Points Earned</b>				

Who observed your practice session?

\_\_\_\_\_

How many recordings did you perform before checking off with the instructor? \_\_\_\_\_

Did you turn in your practice sheet with this final check off sheet? \_\_\_\_\_ Yes or \_\_\_\_\_ No

Is the recording sheet attached to the final check-off sheet \_\_\_\_\_ Yes or \_\_\_\_\_ No

Final Comments

\_\_\_\_\_  
 \_\_\_\_\_