

CTE Pathway/Program	Health Science
Class Name	Physical Therapy 14060
Grade level	Secondary

Unit Title	The Human Body (3 week unit)
Lesson Title	Human Body Systems & Anatomical Positions
Suggested Lesson Time	Weekly overview (1 <sup>st</sup> weekly lesson of a 3 week Unit)
Lesson Objectives	<p><b>3.11</b> The student will be able to explain and demonstrate the basic knowledge of the human body systems after assigned reading, classwork, discussion, and lecture.</p> <p><b>3.12</b> The student will be able to identify directional terms, anatomical planes and body position after assigned reading, classwork, discussion, and lecture.</p>

Objectives
<p><b>Objectives</b></p> <p><b>3.11</b> - Explain and demonstrate the basic knowledge human body systems</p> <p><b>3.12</b> - Identify directional terms, anatomical planes and body position</p>

Preparation	
<i>Instructor</i>	<i>Student</i>
<p>References</p> <p>Quizlet.com resources for anatomical positions include interactive flashcards and test for definitions and visuals to explain the definitions.</p> <p><a href="https://quizlet.com/13856782/anatomical-positions-body-planes-directional-terms-unit-1-flash-cards/">https://quizlet.com/13856782/anatomical-positions-body-planes-directional-terms-unit-1-flash-cards/</a></p> <p><i>Documentation Patient Client Management Systems Review</i>, (APTA, 2015) Retrieved from:  <a href="https://www.apta.org/uploadedFiles/APTAorg/About_U">https://www.apta.org/uploadedFiles/APTAorg/About U</a></p>	<p>Assignments</p> <p>Refer to Day 1-5 Below</p>



[s/Policies/BOD/Practice/DocumentationPatientClientMgmt.pdf](#)

*Vital Signs Skills Check* – Word document has the link to the YouTube video.

[https://www.youtube.com/watch?v=oBJR3\\_xc9O4&feature=youtu.be](https://www.youtube.com/watch?v=oBJR3_xc9O4&feature=youtu.be)

Guide to Physical Therapist Practice, (APTA 2015).

Retrieved from: <http://www.apta.org/Guide/>

Quizlet.com

Kisner, C., & Colby, L.A. (2013). *Therapeutic exercise: Foundations and techniques*. Philadelphia: F.A. Davis Company.

Lippincott, Williams & Wilkins. (2013). *Therapeutic Exercise for Physical Therapy Assistants: Techniques for Intervention*. Philadelphia: Wolters Kluwer Health.

Instructional Media

**Materials to Include:**

- *Anatomical Positions, Planes Test Questions* – Word document
- *Anatomical Positions, Planes Test Answer* – Word document
- *What are Vital Signs* – Word document
- *Vital Signs Test* – Word document
- *Vital Signs Test Answers* – Word document
- *Vital Signs Skills Check* – Word document (includes link)

**Supplement Materials:**

- *Documentation Patient Client Management* - pdf
- *Human Body Systems Movement* - pdf
- *Grading Rubric for Essay Questions* - Word Document (See lesson 1.1)

Equipment and Tools

Students may need to have internet access at home and/or a laptop during classroom time.

Pulse oximeter, blood pressure equipment (digital or stethoscope and cuff and Sphygmomanometer), clock



with a second hand, visual analog scale for pain assessment and/or numerical pain rating scale	
Materials	
Attached files and handouts that may include website links, worksheets, and lecture material.	

### Introduction (Day 1 & 2)

Ask students questions that relate to the objectives:

What?

Why?

How do you think....?

Describe your experience.

### Information Presentation

#### Key Points

#### Day 1

#### Introduction

Opening questions for **3.12** -

- Guess what position a patient is in when said to be in supine? Hook lying? Prone?
- Have students use their knee cap (patella) as a reference and point to:
  - Lateral of knee cap
  - Medial of knee cap
  - Posterior of knee cap
  - Anterior of knee cap
- How would you divide the human body into a sagittal plane? Coronal plane? Transverse plane?
  - \*Be sure to correctly answer the questions after the students have been given a chance to answer.
- Assignment in Class:
  - *Anatomical Positions, Planes Test Questions* – Word document.
  - *Anatomical Positions, Planes Test Answers* – Word document
- Go over test questions and/or prepare lecture using quizlet.com flash cards and/or test to present information.



- Quizlet.com resources for anatomical positions include interactive flashcards and test for definitions and visuals to explain the definitions.
- <https://quizlet.com/13856782/anatomical-positions-body-planes-directional-terms-unit-1-flash-cards/>

## Day 2

### Opening questions for 3.11 -

- Do you know anyone with high blood pressure? How do they have to manage their high blood pressure?
- Do you know anyone who has trouble breathing? How do they manage their breathing?
- Suppose you are conditioning for track and need to increase your intensity of a cardio workout. How do you use your pulse, heart rate, in determining intensity?
  - \*Be sure to correctly answer the questions after the students have been given a chance to answer.
- Lecture on defining systems review, and concentrating student skills:
  - Pulse Rate
  - Temperature
  - Respiration Rate
  - Blood Pressure
- Define what systems review is. Below is information provided by the American Physical Therapy Association (APTA) in the book *Guide to Physical Practice*. They provide this definition.
  - **Systems Review** - a brief, standardized examination of the anatomical and physiological status of the cardiovascular, pulmonary, integumentary, musculoskeletal, and neuromuscular systems and the communication ability, affect, cognition, and learning style of the individual. The data collected allows the physical therapist to screen for the individual's ability to initiate, sustain, and modify purposeful movement for the performance of an action, task, or activity. This baseline screening examination identifies which components of the movement system will require additional tests and measures to rule in or rule out specific diagnoses and to determine the extent or severity of the diagnoses and their impact on the individual's functional capacity and performance.
- Below is a breakdown of the systems review from *Documentation Patient Client Management* - pdf
  - **Cardiovascular/pulmonary**
    - Blood Pressure
    - Edema
    - Heart Rate
    - Respiratory Rate
  - **Integumentary**
    - Pliability (texture)



- Presence of scar formation
  - Skin color
  - Skin integrity
- **Musculoskeletal**
  - Gross range of motion
  - Gross strength
  - Gross symmetry
  - Height
  - Weight
- **Neuromuscular**
  - Gross coordinated movement (Ex. balance, locomotion, transfers, and transitions)
  - Motor function (motor control, motor learning)
- Documentation of systems review may also address communication ability, affect, cognition, language, and learning style:
  - Ability to make needs known
  - Consciousness
  - Expected emotional/behavioral responses
  - Learning preferences (Ex. education needs, learning barriers)
  - Orientation (person, place, time)
- Vital Signs Skills Check – Word document (includes link)
- Students practice taking
  - Pulse rate
  - Respiration rate
  - Temperature
  - Blood pressure
- \*Refer to other resources via the internet or textbooks, on a step by step process of how to take pulse rate, respiration rate, temperature and blood pressure.
- Video gives the students an idea of what treatment from a PTA may look like.
  - Vital Signs Skills Check – Word document (includes link)

### Day 3

- Students practice:
  - Pulse rate
  - Respiration rate
  - Temperature
  - Blood pressure
- *What are Vital Signs* – Word document

### Day 4

- *Vital Signs Test* – Word document
- Go over answers in class.
  - *Vital Signs Test Answers* – Word document



**Day 5**

- Have students demonstrate skills.
- Provide them with a rubric check list to make sure they demonstrate skill correctly.
  - *What are Vital Signs* – Word document is useful in using or creating a skills check list/rubric.

**Summary**

The “Exit Ticket” is a good idea to have students fill out within a few minutes left of class. Below is a sample template.

<b>321 Exit Ticket Template</b>	
3	Things I Learned Today ...
2	Things I Found Interesting ...
1	Question I Still Have ...

**Student Activities**

Refer to Day 1-5 above



**Student Assessment****Day 4**

- Assignment in Class:
  - *Anatomical Positions, Planes Test Questions* – Word document.
  - *Anatomical Positions, Planes Test Answers* – Word document

**Day 5**

- Have students demonstrate skills.
- Provide them with a rubric check list to make sure they demonstrate skill correctly.
  - *What are Vital Signs* – Word document is useful in using or creating a skills check list/rubric.

