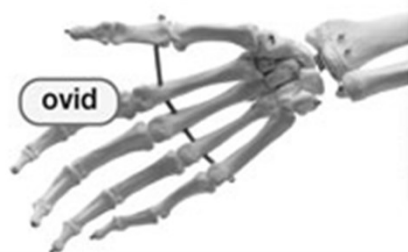
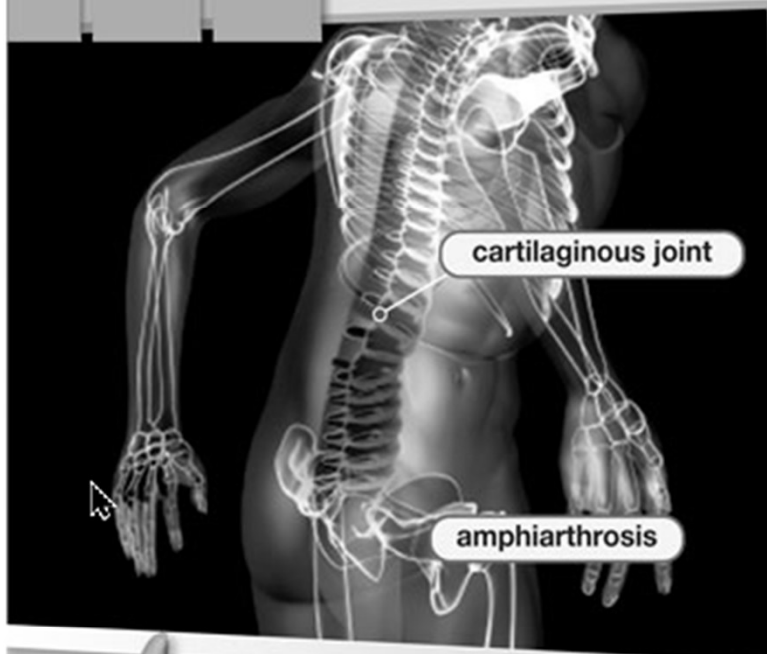


Physiotherapy

Unit 8 – Joints 1

8

Joints 1



Syllabus

Physiotherapy 101

Part 1: **Joints**

Textbook: **The Body Articulate**, Simon University Press, 2010

General Learning Objectives

Upon successful completion of this course, the student will:

1. Identify anatomy of the human joint system.
2. Describe systems of joint classification.
Major joint types
 - a. synarthrosis
 - b. **diarthrosis**
 - c. **amphiarthrosis**
3. Describe the characteristics of **synovial joints**.
4. Describe the characteristics of **cartilaginous joints**.
5. Explain the convex-concave rule.
 - a. **Ovoid** joints
 - b. **Sellar** joints
6. Explain the concept of axis of rotation.
 - a. **monaxial**
 - b. **biaxial**
 - c. **multiaxial**

Course meets Tuesdays in Hermon Building.

Course lab every Thursday night.



- **How does the concept of axis of rotation define joints?**
- There are different types of joints which are identified by the ways in which they allow the body to move.

- **What are some characteristics and examples of synovial joints?**
- Examples include ball and socket joints, such as the joints of the hip and shoulder, and plane joints, including the wrist and ankle. Hinge joints, such as the knee and elbow are also synovial joints. Sellar, or saddle joints are synovial joints as well. The thumb is the only sellar joint in the human body.

ball joint / socket joint

kulový kloub

plane joint

rovinný kloub / plochý kloub

hinge joint

kladkový kloub

sellar / saddle joint

sedlový kloub

Vocabulary

3 Place the words or phrases from the word bank under the correct headings.



ovoid

amphiarthrosis

synovial joint

cartilaginous joint

sellar

monaxial

multiaxial

Joint Shape

Joint Type

Joint Axis

ovoid

vejčitý

amphiarthrosis

tuhý kloub

synovial joints

vyznačují se velkou pohyblivostí a tím,

že obsahují kloubní dutinu

synovial bursa

dutina v pojivové tkáni mezi svaly a šlachami

cartilaginous

chrupavkovitý

sellar

sedlový

monaxial

jednoosý

ovoid

amphiarthrosis

synovial joint

cartilaginous joint

sellar

monaxial

multiaxial

Joint shape:
ovoid, sellar

Joint type:
cartilaginous joint, synovial joint

Joint axis:
monaxial, multiaxial

Resume:

Joint shape:

ovoid, sellar

Joint type:

cartilaginous joint, synovial joint

synarthrosis, amphiarthrosis, diarthrosis

Joint axis:

monaxial, multiaxial

biaxial

Write a word that is similar in meaning to the underlined part.

1 The bursa allows the joint to connect two or more objects by forming a joint freely.

(a _ _ i c _ _ a t _)

Write a word that is similar in meaning to the underlined part.

1 The bursa allows the joint to connect two or more objects by forming a joint freely.

(a _ _ i c _ _ a t _)

articulate

Write a word that is similar in meaning to the underlined part.

2 The point where the finger connects to the hand is a joint that permits movement on two axes, at right angles to each other.

(_ i a _ _ a l)

Write a word that is similar in meaning to the underlined part.

2 The point where the finger connects to the hand is a joint that permits movement on two axes, at right angles to each other.

(_ i a _ _ a l)

biaxial

Write a word that is similar in meaning to the underlined part.

3 The shoulder is an example of a(n) free moving joint.

(_ i a _ _ _ r _ _ i s)

Write a word that is similar in meaning to the underlined part.

3 The shoulder is an example of a(n) free moving joint.

(_ i a _ _ _ r _ _ i s)

diarthrosis

Write a word that is similar in meaning to the underlined part.

4 Running puts stress on the points where two or more bones connect, formed by cartilage and connective tissue that allow for motion.

(_ o i _ t s)

Write a word that is similar in meaning to the underlined part.

4 Running puts stress on the points where two or more bones connect, formed by cartilage and connective tissue that allow for motion.

(_ o i _ t s)

joints

**Listen to a conversation between two students.
Mark the following statements as *True* or *False*.**

- 1** The speakers have an exam on Monday.
- 2** The woman remembers all three joint types.
- 3** Saddle joint is another name for sellar joint.



**Listen to a conversation between two students.
Mark the following statements as *True* or *False*.**

1 The speakers have an exam on Monday.

TRUE


2 The woman remembers all three joint types.



FALSE (she forgot one joint type)

3 Saddle joint is another name for sellar joint.

TRUE

Listening

7  Listen again and complete the conversation.

▶ 0:00 / 0:00  

Student 1: Are you ready for the exam on Monday?

Student 2: I sure hope so. Will you do me a favor and help me study? Let's quiz each other.

Student 1: Sure. Why don't you tell me about 1) ?

Student 2: There are three major joint types. Synarthrosis, 2) , and ... uh-oh.

Student 1: The third type is 3) .

Student 2: That's right. Your turn now. Give me two examples of 4) .

Student 1: Okay. 5) and saddle. What's the other word for saddle joints?

Student 2: It's 6) .



Student 1: Are you ready for the exam on Monday?

Student 2: I sure hope so. Will you do me a favour and help me study?
Let's quiz each other.

Student 1: Sure. Why don't you tell me about

1) joint types?

Student 2: There are three major joint types. Synarthrosis,

2) amphiarthrosis

Student 1: The third type is

3) diarthrosis

Student 2: That's right. Your turn now. Give me two examples of

4) joint shapes.

Student 1: Okay.

5) Ovoid and saddle.

What's the other word for saddle joints?

Student 2: It's

6) sellar joints .

8 Complete the conversation below based on Task 7, with the phrases given. Then, take roles and act it out.

USE LANGUAGE SUCH AS:

Will you do me a favor and ...?

Why don't you tell me about ...?

Give me ...

Student A: You are a student. Talk to Student B about:

- the upcoming exam
- joint types
- joint shapes

Student B: You are another student. Talk to Student A about joint information on the exam.

Are you ready for the exam tomorrow?

The third type is diarthrosis.

Why don't you tell me about joint shapes?

It's sellar joints.

A:

B: Will you do me a favor and help me study? We can quiz each other.

A: Sure.

B: Two shapes are ovoid and saddle. What's the other word for saddle joints?

A: Your turn now. Give me the three major joint types.

B: Synarthrosis, amphiarthrosis, and ... uh-oh.

A:

B: That's right. Thanks.

Video Exercise

