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MODULE TITLE:

Functional anatomy and biomechanics of the Cervical spine

RESPONSIBLE FOR THE MODULE:

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HOURS :

1

LANGUAGE OF TEACHING:

GREEK []

ENGLISH [X]





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AIM OF THE MODULE (*content and acquired skills*)

The aim of this module is to provide the student with comprehensive knowledge of the relevant anatomy and biomechanics of the cervical spine. Another aim of the module is to show that biomechanics and anatomy of the cervical spine have been adapted to serve the functional roles of the region. When the fail due to trauma, degeneration or simply through the normal aging process painful syndromes result.

MODULE CONTENTS (*outline – subtitles of the lectures*)

Anatomy and functional role of the spinal column
Anatomy and functional role of the cervical spine
Osseous anatomy of the cervical spine
Muscular anatomy of the cervical spine
Interrelation with other regions of the spine
Neural anatomy of the cervical spine
Breathing and cervical spine disorders

TEACHING METHOD (*lectures – labs – practice etc*)

Lecture

LEARNING OUTCOMES

Upon the completion of this module the student will be able to:

- Describe the gross anatomy of the spine in whole and the cervical spine in particular.
- Recognize the osseous, neural and muscular element of the cervical spine
- Understand the normal biomechanics of the cervical spine
- Describe the role of the cervical spine and how anatomy and biomechanics have been adapted to serve these roles
- Understand the relationship between poor breathing pattern and some neck pain disorders

LEARNING OUTCOMES - CONTINUED

<i>Learning Outcomes</i>	<i>Educational Activities</i>	<i>Assessment</i>	<i>Students Work Load (hours)</i>
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<ul style="list-style-type: none"> Describe the gross anatomy of the spine in whole and the cervical spine in particular. 	Lectures, slides, practical training on plastic model	Short test to annotate anatomical pictures	4
<ul style="list-style-type: none"> Recognize the osseous, neural and muscular element of the cervical spine 	Lectures, slides, practical training on plastic model	Short test to annotate anatomical pictures	4
<ul style="list-style-type: none"> Understand the normal biomechanics of the cervical spine 	Lectures, slides	Short fill in the blanks and multiple choice test	4
<ul style="list-style-type: none"> Describe the role of the cervical spine and how anatomy and biomechanics have been adapted to serve these roles 	Lectures, slides	Short fill in the blanks and multiple choice test	4
<ul style="list-style-type: none"> Understand the relationship between poor breathing pattern and some neck pain disorders 	Lectures, slides	Short fill in the blanks and multiple choice test	4
		Total	20

OBLIGATORY & SUGGESTED BIBLIOGRAPHY:

1. Susan Standring (Ed.) Grey's Anatomy 2009 Churchill Livingstone
2. Magee, D.J. et al. Scientific foundations and principles of practice in musculoskeletal rehabilitation 2007 Saunders
3. Adams et al The Biomechanics of Back Pain. (2nd Edition). 2006 Churchill



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Livingstone, Edinburgh
4. Mercer and Bogduk The ligaments and annulus fibrosus of human adult cervical intervertebral discs. 1999 Spine 24 (7): 619

