

TEACHER'S GUIDE SHEET

MODULE	BIOMECHANICS OF SPINE
DIDACTIC UNIT	B: BIOMECHANICAL ALTERATIONS OF THE SPINE
TITLE OF ACTIVITY/CLASS	BIOMECHANICS OF THE SPINE: MOST COMMON ELEMENTS OF THE SPINE'S ALTERATIONS/INJURIES AND ITS BIOMECHANICS AFTER AN SPECIFIC INTERVENTION.
OBJECTIVES	<ul style="list-style-type: none"> • To explain the biomechanics of the main injury of the different parts of the spine. • To learn the involvement of the different elements of the spine after a specific injury. • To review the main biomechanical considerations after a spine intervention in its different areas. • To reinforce learning of contents through activities and test.
LENGTH	1h30' - PowerPoint presentation of the contents + Reinforcement activity.
PREVIOUS KNOWLEDGE REQUIRED	In order to fully understand the concepts explained during class, the student should previously revise the anatomy of spine elements and the Didactic Unit A from this module.
TECHNICAL NEEDS	PC with software for the reproduction a power point presentation. Projector and screen to show contents appropriately to all the students during class. You can give the activity material to students online or print.
RESOURCES NEEDED	PowerPoint file of class material presentation and the reinforcement activity pdf file, print or online version. Each student needs one copy.



DESCRIPTION OF THE CLASS/ACTIVITY

Part 1: Teacher's theoretical explanation

The teacher's presentation will begin remembering the different kind of forces that the spine's vertebrae are influenced. Most of the next presentation is based in biomechanical influencing forces, so the teacher must insist the students to previously revise this concepts before this presentation.

After that, teacher will begin the explanation of the main injuries performed by stained or altered biomechanics in the vertebral spine: starting from the skull's base (upper cervical spine) and finishing in the lumbar spine.

Finally, the teacher will explain about the main biomechanical considerations after spine intervention, referring since upper cervical spine to lumbar spine.

Part 2: Practical activities for students

Students must correctly complete the sentences, based on concepts from Unit B, inserting one of the options framed by default

TASKS TO BE DEVELOPED BY THE STUDENT IN CLASS

In order to fully understand the concepts explained during class, the student should afterward resolve the 'Reinforcement activity' pdf.

TASKS TO BE DEVELOPED BY THE STUDENT OUTSIDE OF CLASS (if required)

After the class and concept presentation, the students should revise the PDF with the contents of the didactic unit or the PowerPoint presentation (what the teacher prefer to provide).

EVALUATION METHODOLOGY

The teacher can use the evaluation method that she/he considers. The correct answers for the Reinforcement activity are at the end of the same document.

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