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|-------------------------------|--|------------------------|---|----------------------------|
| Course title                  | <b>Anatomy of Movement</b>   |                        |   |                            |
| Course code                   | <b>MEDI126</b>   |                        |   |                            |
| Course type                   | <b>Lectures</b>  |                        |   |                            |
| Level                         | <b>Diploma</b>   |                        |   |                            |
| Year / Semester               | <b>1<sup>st</sup> Year / 1<sup>st</sup> Semester</b>   |                        |   |                            |
| Teacher's name                | <b>Polyviou Antonis</b>  |                        |   |                            |
| ECTS                          | 6  | <b>Lectures / week</b> | 3 | <b>Laboratories / week</b> |
| Course purpose and objectives | <p>The purpose of the course is to provide students with the necessary knowledge as it relates to the development and function of the organs that make up the human body with a focus on the muscular and muscular system, transmitting fundamental knowledge on anatomy and kinesiology. Emphasis is also placed on the movement and the basic human anatomy and the analysis of bones, joints and muscles as they relate to the execution of various body movements and exercises.</p>   |                        |   |                            |
| Learning outcomes             | <p>Upon the completion of the course, the students are expected to:</p> <p><b>Knowledge</b></p> <ol style="list-style-type: none"> <li>1. <b>Mention</b> the various types of human movement, planes and axes of movement.</li> <li>2. <b>Explain</b> the morphology and anatomical characteristics of bones, ligaments, muscles and joints.</li> <li>3. <b>Describe</b> the function of the musculoskeletal system and recognise the various movements of the joints and muscles that facilitate certain physical exercise movements.</li> <li>4. <b>Recognise</b> the importance of the spine as a structure of stability and mobility as well as the role of the abdominal and back muscles.</li> <li>5. <b>Recognise</b> the agonist and the antagonist muscles in a series of movements and exercises</li> </ol> <p><b>Skills</b></p> <ol style="list-style-type: none"> <li>6. <b>Analyse</b> movement analysis and joints (anterior bending, extension, lateral bending and twisting of the trunk, movements of the arm, movements of the forearm, etc.)</li> <li>7. <b>Distinguish</b> the types of muscle contractions</li> </ol> <p><b>Competences</b></p> <ol style="list-style-type: none"> <li>8. <b>Suggest</b> movements or exercises that activate specific muscle groups</li> </ol> |                        |   |                            |

| Prerequisites               | Required   |
|-----------------------------|--|
| <b>Course content</b>       | <ul style="list-style-type: none"> <li>• Direction, types, planes and axes of motion</li> <li>• Bones – osseous tissue</li> <li>• Joints of the skeleton</li> <li>• Skeletal muscles and muscle mechanisms</li> <li>• Trunk – spine</li> <li>• Trunk – abdominal and back muscles</li> <li>• Upper extremity – shoulder girdle/elbow/wrist</li> <li>• Lower extremity – hip/knee/foot</li> <li>• Kinesiology analysis of simple movements and exercises</li> <li>• Muscle agonists and antagonists when performing various movements</li> </ul>  |
| <b>Teaching methodology</b> | The content of the course is taught through lectures with the help of a computer, video projector, electronic presentations and multimedia and the use of a whiteboard. Active student participation is ensured through guided discussions.  |
| <b>Bibliography</b>         | <p><b>Greek Bibliography</b></p> <ul style="list-style-type: none"> <li>• Αγγελούσης, Ν., και Γιάκας, Ι. (2015). <i>Βασικές έννοιες αθλητικής εμβιομηχανικής [Basic concepts of sports biomechanics]</i>. <b>Kallipos, Open Academic Editions</b>. Ανακτήθηκε από <a href="https://hdl.handle.net/11419/5961">https://hdl.handle.net/11419/5961</a></li> <li>• Blandine Calais – Germain, (2020). <i>Ανατομία της κίνησης [Anatomy of Movement]</i>, Εκδόσεις: Σάλτο, ISBN: 9789602781906</li> <li>• Δούκας, Ν. Μ. (2005). <i>Κινησιολογία [Movement]</i>. Ιατρικές Εκδόσεις Λίτσας</li> </ul> <p><b>English Bibliography</b></p> <ul style="list-style-type: none"> <li>• Tucker, L., and Foulston, J. (2002). <i>An introductory guide to Anatomy and Physiology</i>. KES College.</li> <li>• Kingston, B. (2002). <i>Understanding muscles : A practical guide to muscle function</i>. Nelson Thornes. ISBN: 0-7487-4318-9</li> <li>• Stone, R. J. and Stone, J. A. (2009). <i>Atlas of skeletal muscles</i>. 6<sup>th</sup> Edition. McGraw - Hill Higher Education. ISBN: 978-0-07-128359-5</li> <li>• Floyd, R. T., Thompson, C. W. (2001). <i>Manual of structural Kinesiology</i>. McGraw-Hill. ISBN: 0-07-118191-1</li> </ul> |
| <b>Assessment</b>           | <ul style="list-style-type: none"> <li>• Attendance and class participation: 10%</li> <li>• Intermediary written examination: 40%</li> <li>• Final written examination: 50%</li> </ul>   |
| <b>Language</b>             | Greek or English   |