

## COURSE OUTLINE MOVEMENT ANALYSIS IN OCCUPATIONAL THERAPY II

### 1. GENERAL

<b>SCHOOL</b>	Physical Education, Sports and Occupational Therapy		
<b>DEPARTMENT</b>	Occupational Therapy		
<b>LEVEL OF STUDIES</b>	UPS - LEVEL 6		
<b>COURSE CODE</b>		<b>SEMESTER</b>	4 <sup>o</sup>
<b>COURSE TITLE</b>	Movement Analysis in Occupational Therapy II		
<b>TEACHING ACTIVITIES</b> <i>If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.</i>		<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>
Theory		3	6
Laboratory		2	
<i>Please, add lines if necessary. Teaching methods and organization of the course are described in section 4.</i>			
<b>COURSE TYPE</b> <i>Background, General Knowledge, Scientific Area, Skill Development</i>	Background		
<b>PREREQUISITES:</b>	NO		
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	GREEK		
<b>COURSE OFFERED TO ERASMUS STUDENTS:</b>	NO		
<b>COURSE URL:</b>			

### 2. LEARNING OUTCOMES

<p><b>Learning Outcomes</b> <i>Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</i></p> <p>The purpose of the course is twofold: a) to help students understand developmental changes and pathological disorders of posture and gait, and b) to train them in the analysis of human movement in both clinical and laboratory settings.</p> <p>Upon successful completion of the course, participants will be able to:</p> <ul style="list-style-type: none"> <li>• Identify and analyze developmental changes in posture and gait across different life stages.</li> <li>• Recognize and analyze pathological disorders of posture and gait.</li> <li>• Understand the principles of biomechanics related to prosthetic devices, orthoses, and assistive devices.</li> <li>• Apply clinical methods of movement analysis for the assessment of patients with movement disorders.</li> <li>• Use laboratory methods of movement analysis for quantitative evaluation.</li> <li>• Assess and interpret data from both clinical and laboratory analyses.</li> </ul>						
<p><b>General Skills</b> <i>Name the desirable general skills upon successful completion of the module</i></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;"><i>Search, analysis and synthesis of data and information,</i></td> <td style="width: 50%; border: none;"><i>Project design and management</i></td> </tr> <tr> <td style="border: none;"><i>ICT Use</i></td> <td style="border: none;"><i>Equity and Inclusion</i></td> </tr> <tr> <td style="border: none;"><i>Adaptation to new situations</i></td> <td style="border: none;"><i>Respect for the natural environment</i></td> </tr> </table>	<i>Search, analysis and synthesis of data and information,</i>	<i>Project design and management</i>	<i>ICT Use</i>	<i>Equity and Inclusion</i>	<i>Adaptation to new situations</i>	<i>Respect for the natural environment</i>
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<i>Decision making</i> <i>Autonomous work</i> <i>Teamwork</i> <i>Working in an international environment</i> <i>Working in an interdisciplinary environment</i> <i>Production of new research ideas</i>	<i>Sustainability</i> <i>Demonstration of social, professional and moral responsibility and sensitivity to gender issues</i> <i>Critical thinking</i> <i>Promoting free, creative and inductive reasoning</i>
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<b>GENERAL COMPETENCIES DEVELOPED</b> <ul style="list-style-type: none"> <li>● Search, analysis, and synthesis of data and information, ICT use</li> <li>● Adaption to new situations</li> <li>● Decision-making</li> <li>● Teamwork</li> <li>● Working in an interdisciplinary environment</li> <li>● Production of new research ideas</li> <li>● Project design and management</li> <li>● Critical thinking</li> <li>● Promoting free, creative, and inductive reasoning</li> </ul>
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### 3. COURSE CONTENT

<ol style="list-style-type: none"> <li>1. Introduction</li> <li>2. Developmental changes in posture and gait</li> <li>3. Pathological disorders of posture</li> <li>4. Pathological disorders of gait</li> <li>5. Biomechanics of prosthetic devices, orthoses, and assistive devices</li> <li>6. Clinical movement analysis</li> <li>7. Practical application of clinical movement analysis</li> <li>8. Laboratory movement analysis – Kinematics</li> <li>9. Laboratory movement analysis – Kinetics</li> <li>10. Laboratory movement analysis – Neuromuscular function</li> <li>11. Practical application of laboratory movement analysis I</li> <li>12. Practical application of laboratory movement analysis II</li> <li>13. Recap</li> </ol>
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### 4. LEARNING & TEACHING METHODS - EVALUATION

<b>TEACHING METHOD</b> <i>Face to face, Distance learning, etc.</i>	<ul style="list-style-type: none"> <li>- Face-to-face teaching</li> <li>- Theoretical lectures</li> <li>- Laboratory classes</li> <li>- Distance learning</li> </ul>																
<b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> <i>Use of ICT in Teaching, in Laboratory Education, in Communication with students</i>	Use of ICT in teaching, laboratory education, and communication with students (digital slides, videos, digital anatomy applications, MS Teams/e-class, webmail)																
<b>TEACHING ORGANIZATION</b> <i>The ways and methods of teaching are described in detail.</i> <i>Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research &amp; analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study / creation, project, creation, project. Etc.</i>  <i>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards.</i>	<table border="1"> <thead> <tr> <th style="background-color: #f2f2f2;"><i>Activity</i></th> <th style="background-color: #f2f2f2;"><i>Workload/semester</i></th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>39</td> </tr> <tr> <td>Project</td> <td>80</td> </tr> <tr> <td>Bibliographic research &amp; analysis</td> <td>59</td> </tr> <tr> <td>Exams</td> <td>2</td> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td><b>Total Course</b></td> <td><b>180</b></td> </tr> </tbody> </table>	<i>Activity</i>	<i>Workload/semester</i>	Lectures	39	Project	80	Bibliographic research & analysis	59	Exams	2					<b>Total Course</b>	<b>180</b>
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<p style="text-align: center;"><b>STUDENT EVALUATION</b></p> <p><i>Description of the evaluation process</i></p> <p><i>Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others</i></p> <p><i>Please indicate all relevant information about the course assessment and how students are informed</i></p>	<p>Movement Analysis Project (40%)</p> <p>Written Examination (60%)</p>
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## 5. SUGGESTED BIBLIOGRAPHY

1. Neumann, D.A. (2018). *Κινησιολογία του μυοσκελετικού συστήματος*. Επιμέλεια: Η. Τσέπης. Αθήνα: Σ. Αθανασόπουλος & ΣΙΑ Ι.Κ.Ε.
2. Houglum P.A. Brunnstrom's *Κλινική Κινησιολογία (6η έκδοση)*. Αθήνα: Παρισιάνου Ανώνυμη Εκδοτική Εισαγωγική Εταιρεία Επιστημονικών Βιβλίων.
3. Lippert, L.S. (2023). *Κινησιολογία*. Αθήνα: Εκδόσεις Κωνσταντάρας Ε.Ε..
4. Richards J. (2021). *Κλινική Εμβιομηχανική*. Αθήνα: Εκδόσεις Broken Hill Publishers.
5. Nordin M., H.Frankel V. (2018). *Βασική Εμβιομηχανική του Μυοσκελετικού Συστήματος*. Αθήνα: Λαγός Δημήτριος Εκδόσεις