

**COURSE OUTLINE  
MSc DISSERTATION**

**1. GENERAL**

<b>SCHOOL</b>	School of Health Sciences		
<b>DEPARTMENT</b>	Physiotherapy		
<b>LEVEL OF EDUCATION</b>	Postgraduate		
<b>COURSE CODE</b>	MPDE	<b>SEMESTER OF STUDY</b>	C
<b>COURSE TITLE</b>	MSc Dissertation		
<b>SELF-ENDED TEACHING ACTIVITIES</b>	<b>WEEKLY TEACHING HOURS</b>	<b>CREDIT UNITS</b>	
<i>Theory + Exercise tutorials</i>	-	<b>30</b>	
<i>Laboratory</i>	-		
<b>COURSE TYPE</b>	Special Background		
<b>PREREQUISITE COURSES:</b>	All the courses of the program		
<b>C LANGUAGE OF TEACHING AND EXAMINATIONS :</b>	Greek/English		
<b>ERASMUS STUDENTS</b>	YES		
<b>ECLASS COURSE CODE</b>			
<b>COURSE RESPONSIBLE</b>	<a href="#">Program Coordinating Committee - Supervising Professor</a>		
<b>PHONE/ EMAIL</b>			

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**2. LEARNING OUTCOMES**

<b>Learning results</b>	
<b>Upon successful completion of the course, the student will be able:</b>	
To apply scientific research on cutting-edge and clinical utility issues, relevant to the wider field of Physiotherapy, which research should contain elements of originality, either through the effort to produce new knowledge, or through the development of critical thinking, or through a combination of the above two.	
<b>General &amp; Special Skills</b>	
<p>The course aims to develop the following <b>general</b> skills:</p> <ul style="list-style-type: none"> <li>• Production of new knowledge.</li> <li>• Critical thinking.</li> <li>• Research gap identification.</li> <li>• Conception of original ideas for the preparation of scientific research.</li> <li>• Investigating scientific fields with clinical applicability.</li> </ul>	<p>The course aims to develop the following <b>specific</b> skills:</p> <ul style="list-style-type: none"> <li>• Overview and critical analysis of existing knowledge in the fields of prevention, improvement and rehabilitation.</li> <li>• Applications of new clinical methods and techniques to existing theoretical models with the aim of improving health care.</li> <li>• Development of new clinical methods and techniques.</li> <li>• Development of scientific text writing skills, oral support to an audience.</li> <li>• Critical treatment of theoretical models as well as methodologies, techniques or tools for approaching research fields in the field of Physiotherapy.</li> <li>• Proposal to create new theories - innovations - models as well as clinical methodologies, techniques or tools to approach research fields, in the field of Physiotherapy.</li> </ul>

### 3. COURSE CONTENT

<ol style="list-style-type: none"> <li>1. Review of the literature.</li> <li>2. Identifying a research gap.</li> <li>3. Conceptualizing an original research idea.</li> <li>4. Determination of research purpose and research hypotheses.</li> <li>5. Research protocol design.</li> <li>6. Determination of preparation schedule.</li> <li>7. Calculating costs and predicting potential constraints.</li> <li>8. Drafting of a request for elaboration to the Ethics Committee.</li> <li>9. Application of pilot measurements.</li> <li>10. Sample collection.</li> <li>11. Elaboration of main measurements.</li> <li>12. Data collection as a result of the main measurements.</li> <li>13. Statistical analysis of the data and extraction of results.</li> <li>14. Interpretation of the results and their comparison with the results of related research.</li> <li>15. Drawing conclusions about clinical significance.</li> <li>16. Writing the paper.</li> <li>17. Public support of work.</li> </ol>
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### 4. TEACHING AND LEARNING METHODS - ASSESSMENT

<b>METHOD OF TEACHING</b>	Exclusive collaboration of the supervisor and the director of the research laboratory under which the study is being prepared, with the student/researcher (supervised study).		
<b>USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES</b>	Use of PC, projector, video, and ICT (e - class, email, MS Teams, google docs) in communication with the student/researcher. Use of the necessary research equipment to carry out the measurements and collect the data.		
<b>ORGANIZATION OF SUPERVISED STUDY</b>	<b>Activity</b>	<b>Semester Workload</b>	
	Independent Study & article analysis	250	
	Elaboration of a study	200	
	Writing a paper	200	
	Preparation for presentation and public support of the work	100	
	<b>Total Course</b>	<b>750</b>	
<b>STUDENT EVALUATION</b>	The evaluation of the students is carried out by a three-member evaluation committee (supervisor, internal evaluator, external evaluator) in accordance with the regulation of the MSc and the relevant decisions of the Assembly of the Department.		

## 5. RECOMMENDED BIBLIOGRAPHY

1. Hicks C. *Research Methods for Clinical Therapists*, 4th edition, Churchill Livingstone Publications, 2004
2. Sim J. and Wright C. *Research in Health Care*, Stanley Thornes Publications, 2000
3. Polgar S. and Thomas SA *Introduction to Research in the Health Sciences*, 5th edition, Churchill Livingstone Publications, 2008
4. Thomas , J. , Nelson , J. \_\_ *Research Methods in Physical Activity*, Paschalidis Publications, 2003
5. Zafeiropoulos K. *How is a scientific paper done? Scientific research and writing papers*, Kritiki Publications, 2005
6. Kampitsis X. *The Research in Sports Sciences*, Tsartsiani Publications, Thessaloniki, 2004.
7. Bowers , D. \_ *Fundamental concepts in biostatistics*, P. X. Paschalidis Medical Publications, 2011
8. Pagano M. and Gauvreau K. *Principles of biostatistics*, Hellenic Publications, 2002
9. Trichopoulos D., Tzonou A. and Katsougianni K. *Biostatistics*. Parisianos Publications, 2000
10. Kirkwood B. and Sterne J. *Essentials of Medical Statistics*. Blackwell Science, 2003
11. Field A. *Discovering Statistics using IBM SPSS Statistics*, 4th edition, Sage Publication, 2013.