

## ELECTROPHYSICAL AGENTS

Course Name	Code	Term	Theory (hours/week)	Application (hours/week)	Laboratory (hours/week)	ECTS
Electrophysical Agents II	FTR 206	2.year/ 2.term spring	2	2	-	3
Prerequisites	-					
Course language	Turkish					
Course type	Compulsory					
Learning and teaching strategies	Lecture, applications					
Instructor (s)						
Course objective(Aim of course)	To provide knowledge of thermal principles of electrotherapy modalities, tissue responses to modalities, and mechanisms and application techniques of high frequency currents.					
Learning outcomes	<ol style="list-style-type: none"> <li>1. I. Improves their understanding of fundamentals,</li> <li>2. II. Learns effects and application techniques of high frequency currents.</li> </ol>					
References	-Kahn, Joseph "Principles and practice of electrotherapy" New York, 1991. - Shelia Kitchen "Electrotherapy : evidence-based practice"Edinburg, 2002. - John Low, Ann Reed "Electrotherapy explained : principles and practice" Oxford, 2004. -Theresa Nalty."Electrotherapy clinical procedures manual" New York, 2001. Steven L. Wolf, "Electrotherapy" New York,1981.					

**Course outline weekly:**

Weeks	Topics
1. Week	Thermal and Non-Thermal Effects
2. Week	Generation of High Frequency Currents
3. Week	Properties and Classification of High Frequency Currents
4. Week	Properties of Short Wave Diathermy
5. Week	Application of Short Wave Diathermy
6. Week	Properties of Pulsed Short Wave Diathermy
7. Week	Properties of Micro Current Diathermy
8. Week	Properties of Micro Current Diathermy
9. Week	Properties of Ultrasound waves
10. Week	Applications of Ultrasound
11. Week	Magnetotherapy
12. Week	Extracorporeal Shock Wave Therapy (ESWT)
13. Week	Environmental Electro Pollution
14. Week	Overwiev
15. Week	General evaluation

**ECTS (Student Work Load Table)**

Activities	Number	Duration	Total Work Load
Course Duration (X14 )	14	2	28
Laboratory			
Practice	14	2	28
Field Study			
Study Time Of Outside Of Class (Pre-Study, Practice, Etc.)			
Presentations (Video shoot/Poster preparation/Oral presentation, Etc.)			
Seminars			
Project			
Case study			
Role playing, Dramatization			
Writing articles, Critique			
Time To Prepare For Midterm Exam	1	9	9
Final Exam Preparation Time	1	12	12
<b>Total Work Load ( hour) / 25(s)</b>	77 / 25 = 3,08		
<b>ECTS</b>	3		

## Evaluation System

<b>Mid-Term Studies</b>	<b>Number</b>	<b>Contribution</b>
Midterm exams	1	%50
Quiz		
Laboratory		
Practice	1	%50
Field Study		
Course Internship (If There Is)		
Homework's		
Presentation and Seminar		
Project		
Other evaluation methods		
<b>Total Time To Activities For Midterm</b>		100
<b>Final works</b>		
Final	1	%50
Homework		
Practice	1	%50
Laboratory		
<b>Total Time To Activities For Midterm</b>		100
Contribution Of Midterm Studies On Grades		%50
Contribution Of Final Exam On Grades		%50
<b>Total</b>		100

**The relationship between learning outcomes and the program qualifications of the courses**

Program Qualifications	Learning outcomes	
	L.O.1	L.O. 2
1. Sufficient background in basic- clinical medical sciences and physical therapy and rehabilitation discipline; ability to use theoretical and practical skills and knowledge in these fields with analytical thinking	5	
2. Ability to determine, define, formulate and solve the factors that affect health; ability to choose and apply evidence based techniques and new methods for this aim.		5
3. Ability to choose and use modern equipments, techniques and modalities for physiotherapy and rehabilitation practices; effectively use the informatique technologies.		5
4. Ability to design multidisciplinary research, keep records, collect appropriate data, analysis and interpret results.		
5. Ability to attain new knowledge, make literature reviews, use medical databases and sources of information devoted to medical- health sciences		
6. To work autonomously and effectively in health team and self confidence to take responsibility		
7. To internalize characteristically development, literate and lifelong learning; quality development, to contribute education and promotion programs in field, to internationalize their professional behavior.		

8. To have professional deontology and ethical awareness		
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**Contribution to the level of proficiency: 1. Lowest, 2. Low / Medium, 3. Average, 4. High, 5. Excellent**