

**FTR206 - Electophysical Agents II**

Course Name	Code	Term	Theory (hours/week)	Application (hours/week)	Laboratory (hours/week)	ECTS
Electophysical Agents II	FTR 206	4. Semester /2.term spring	2	2	-	3
Prerequisites	-					
Course language	Turkish					
Course type	Compulsory					
Learning and teaching strategies	Lecture, Question-answer, case discussion, Clinical Practice					
Instructor (s)						
Course objective(Aim of course)	To examine the thermal principles of electrotherapy, the responses of tissues against electrotherapy modalities commonly used in physiotherapy, and to teach the mechanisms and application methods of high frequency currents.					
Learning outcomes	<ol style="list-style-type: none"> <li>1. Gains knowledge and skills on the effects and application techniques of medium frequency currents applications</li> <li>2. Gains knowledge and skills on the effects and application techniques of high frequency currents applications</li> <li>3. Gains knowledge and skills on the effects and application techniques of TENS and MENS applications on tissue</li> </ol>					
References	<ul style="list-style-type: none"> <li>-Arzu Razak Özdiçler, Fiziksel modaliteler ve elektroterapi, İstanbul : İstanbul Tıp Kitabevi, 2014</li> <li>-Alain. Bélanger ; çeviri editörü, Edibe Yakut , çevirenler, Edibe Ünal, Murat Dalkılıç, Defne Kaya. Kanita dayalı elektroterapi, Ankara : Pelikan, 2012</li> <li>-Nihal Şimşek, Elektroterapide temel prensipler ve klinik uygulamalar, Ankara : Pelikan Kitabevi, 2015</li> </ul>					

**Course outline weekly:**

Weeks	Topics
1. Week	Introduction to the Course; Medium frequency currents / Interferential Currents / theoretical
2. Week	Interventional currents - Application of vacum interventional currents
3. Week	Russian Movements / Theoretical Russian Movements / application
4. Week	Russian Movements / application Interferential currents - Russian currents DISCUSSION
5. Week	Transcutaneal electrical nerve stimulation (TENS), / theoretical TENS Application
6. Week	Microcurrent stimulation (MENS) Theoretical / MENS and TENS application
7. Week	Neuromuscular electrical stimulation theoretical and practical (Repeat)
8. Week	Midterm Exam
9. Week	High frequency currents Theoretical High frequency currents Practical
10. Week	High frequency currents Practical
11. Week	Pulsed Short wave diathermy theoretical / Shortwave- Pulsed Shortwave practice
12. Week	Ultrasound / theoretical Ultrasound Application
13. Week	Ultrasound Application
14. Week	An overview
15. Week	An overview

**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, Group study)			
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>	<b>77 / 25 = 3,08</b>		
<b>ECTS</b>	<b>3</b>		

**Evaluation System**

Mid-Term Studies	Number	Contribution
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>	<b>100</b>	
<b>Final works</b>		
Final	1	%50
Homework		
Practice	1	%50
Laboratory		
<b>Total Time To Activities For Midterm</b>	<b>100</b>	
Contribution Of Midterm Studies On Grades		%40
Contribution Of Final Exam On Grades		%60
<b>Total</b>	<b>100</b>	

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

Program Qualifications	Learning outcomes		
	L.O.1	L.O. 2	L.O.3
1-Acquire proficient infrastructure related to the field of Physiotherapy and Rehabilitation, gain the ability to use theoretical and practical knowledge and skills in this field.	5	5	5
2-Identify, define the factors affecting health and gain problem-solving skill by using the information they have; plan and implement a treatment and exercise program with appropriate evidence-based methods and new techniques.	5	5	5
3-Gain the ability to use information technologies effectively, as well as the ability to select and use modern tools, techniques and agents necessary for physiotherapy and rehabilitation applications.	5	5	5
4-Design individual and multidisciplinary research, keep records, prepare reports, analyze and interpret results for quality service and research in health sciences.			
5-They conduct a literature search to access the information by using evidence-based databases and information sources.			
6-Gain autonomy in interdisciplinary and individual studies, ability to work effectively and take responsibility and awareness of the universal and social effects of their professional practice.			
7-Adopt life-long learning; contribute to quality improvement, field-related training and introductory programs and exhibit their professional behavior at national and international level.			
8-Have deontological and ethical awareness in professional researches and applications.			

**Contribution to the level of proficiency: 1. Lowest, 2. Low / Medium, 3. Average, 4. High, 5. Excellent**