



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Electrotherapy							
Course Code		FZ005		Course Level		Short Cycle (Associate's Degree)			
ECTS Credit	3	Workload	75 (Hours)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course		To teach main principles of electro physical therapy To examine the response of the tissues against to electrotherapy modalities which used in physiotherapy widely To teach the mechanism of current which have low and medium frequency and their application methods							
Course Content		Electro physical mechanisms The physiological responses of muscle and nerve The properties of healthy and denervated muscle stimulation will be discussed. Basic features and applications of the principles of low-frequency and medium-frequency currents will be examined.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation)					
Name of Lecturer(s)									

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	70

Recommended or Required Reading

1	Şimşek N. "Elektroterapi Ders Notları" Başkent Üniversitesi, 2003
2	Yakut E. "Kanıta Dayalı Elektroterapi", Pelikan Yayınları, 2008.

Week	Weekly Detailed Course Contents	
1	Theoretical	Elektrik Akımının Özellikleri, Akım Türleri
2	Theoretical	The general physical effects of electrotherapy
3	Theoretical	History of electrotherapy
4	Theoretical	Straight Streams and Modified Forms of direct current
5	Theoretical	Iontophoresis
6	Theoretical	Electrodiagnostic testing
7	Theoretical	High voltage pulsed galvanic stimulation
8	Intermediate Exam	Midterm Exam
9	Theoretical	Low Frequency Currents (Faradic current)
10	Theoretical	Low Frequency Currents (Sinusoidal currents)
11	Theoretical	Low Frequency Currents (Ultra Reiz Currents)
12	Theoretical	Low Frequency Currents (Diadynamic Current)
13	Theoretical	Electric Currents which have analgesic purposes
14	Theoretical	Medium Frequency Currents (Interferential current, Russian current)
15	Theoretical	Medium Frequency Currents (Interferential current, Russian current)
16	Final Exam	Fall term final exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	2	2	56
Midterm Examination	1	8	1	9



Final Examination	1	9	1	10
Total Workload (Hours)				75
[Total Workload (Hours) / 25*] = ECTS				3
*25 hour workload is accepted as 1 ECTS				

Learning Outcomes

1	
2	Indications of the devices used in the physical therapy unit
3	Contraindications for the devices used in the physical therapy unit
4	To learn the properties of low frequency currents
5	Learning the properties of medium frequency currents

Programme Outcomes (Physiotherapy)

1	To be able to recall the information of research methods and statistics so as to follow the developments, monitor and interpret scientific literature
2	To have the appropriate knowledge of basic sciences at the level of interest, to use specific medical terms and terminology of physical therapy
3	To be able to recall knowledge of the general structure and properties of musculoskeletal system and the joints and to evaluate the story of musculoskeletal diseases.
4	To be able to comprehend the methods of measurement of the range of motion of joints and to measure it.
5	To be able to implement a general evaluation of posture analysis and gait analysis.
6	To be able to recall the knowledge about general characteristics of musculoskeletal diseases, osteoporosis, osteoarthritis, rheumatoid arthritis, ankylosing spondylitis, especially rheumatic diseases, mechanical low back and neck pain, disc herniation, soft tissue disorders and to apply appropriate physiotherapy.
7	To be able to recall the knowledge and gain skills about the devices and the agents of heater used in physical therapy, indications and contraindications of using, and the necessary information about how to apply on patients.
8	To be able to recall the knowledge of the electromagnetic field.
9	To be able to recall what Elektroakupunktur, Laser, Biofeedback, cervical and lumbar traction systems, pneumatic compression therapy are, and how to apply them, which one is applicable to patients.
10	To be able to recall what manipulation-mobilization is and which patients are suitable for this application.
11	To be able to recall what massage and hydrotherapy treatments are and which patients are suitable for these applications.
12	To be able to gain the professional and ethical awareness, apply gained knowledge and skills in real life situations and transfer gained knowledge to individuals around her/his environment, and improve behavior of life-long learning.
13	To gain knowledge about methods of diagnosis, protection and treatment of diseases
14	To be able to recall the knowledge and gain skills about physical therapy and rehabilitation methods to be applied to neurological disorders.
15	To be able to recall the knowledge and gain skills about physical therapy and rehabilitation methods to be applied to cardiopulmonary disorders.
16	To be able to recall the knowledge and gain skills about physical therapy and rehabilitation methods to be applied to pediatric patients.
17	To be able to gain knowledge about the effects of fitness and exercise on metabolism and responses of body systems to them.
18	To have knowledge about rehabilitation services
19	To become individuals who can do interdisciplinary team work, with a sense of social responsibility and entrepreneur.
20	To be able to recall the knowledge about Atatürk's Principles and the History of Turkish Revolution.
21	To be able to gain the knowledge and ability to become contemporary individuals who can use Turkish language grammar well and know a foreign language knowledge necessary to follow the developments in the profession.

Contribution of Learning Outcomes to Programme Outcomes 1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High

	L1
P7	4
P8	2
P14	3

