

**Vocational School / Electroneurophysiology**

**2024 - 2025 Academic Year**

**ELECTROMYOGRAPHY I**

**Syllabus**

<b>Course Description</b>					
<b>Name</b>	<b>Code</b>	<b>Semester</b>	<b>T+A Hour</b>	<b>Credit</b>	<b>ECTS</b>
ELECTROMYOGRAPHY I	EFZ2163180	Fall Semester	2+0	2	5
<b>Prerequisites Courses</b>					
<b>Recommended Elective Courses</b>					
<b>Language of Instruction</b>	Turkish				
<b>Course Level</b>	Short Cycle (Associate's Degree)				
<b>Course Type</b>	Required				
<b>Course Coordinator</b>	Assoc.Prof. Fikret AYSAL				
<b>Name of Lecturer(s)</b>	Assoc.Prof. Fikret AYSAL				
<b>Assistant(s)</b>					
<b>Aim</b>	Neuroanatomophysiology, motor conduction studies, sensory conduction studies, needle EMG and electrophysiology learned				
<b>Course Content</b>	This course contains; Peripheral Nervous System: Upper Limb,Peripheral Nervous System: Lower Limb,Anatomophysiology of peripheral nervous system, Introduction to Electrophysiology,Electromyography (EMG) Laboratory, Electrodes and Equipment,Artefacts,Sensory Nerve Conduction Studies,Motor Nerve Conduction Studies,Late Responses: F-Waves,Late Responses: H-Reflexes,Needle electromyography,Conduction block,The Eye Blink Reflex ,Autonomic Tests.				
<b>Course Learning Outcomes</b>			<b>Teaching Methods</b>	<b>Assessment Methods</b>	
Ability to perform needle EMG and electrophysiological tests.			16, 37, 5, 6, 9	A, D	
To define engine conduction operation.			16, 6, 9	A, D, E	
To define a sensory message study.			16, 6, 9	A, D, E	
Defining neuroanatomophysiology.			9	A, E	
<b>Teaching Methods</b>	16: Question - Answer Technique, 37: Computer-Internet Supported Instruction, 5: Cooperative Learning, 6: Experiential Learning, 9: Lecture Method				
<b>Assessment Methods</b>	A: Traditional Written Exam, D: Oral Exam, E: Homework				
<b>Lecture Schedule</b>					
<b>Sequence</b>	<b>Topics</b>	<b>Preliminary Preparation</b>			
1	Peripheral Nervous System: Upper Limb	Lecture Notes			
2	Peripheral Nervous System: Lower Limb	Lecture Notes			
3	Anatomophysiology of peripheral nervous system	Lecture Notes			
4	Introduction to Electrophysiology	Lecture Notes			
5	Electromyography (EMG) Laboratory, Electrodes and Equipment	Lecture Notes			
6	Artefacts	Lecture Notes			
7	Sensory Nerve Conduction Studies	Lecture Notes			
8	Motor Nerve Conduction Studies	Lecture Notes			
9	Late Responses: F-Waves	Lecture Notes			
10	Late Responses: H-Reflexes	Lecture Notes			
11	Needle electromyography	Lecture Notes			
12	Conduction block	Lecture Notes			
13	The Eye Blink Reflex	Lecture Notes			
14	Autonomic Tests	Lecture Notes			
<b>Evaluation Methods</b>		<b>Weight(%)</b>			
Midterm Exam		40			
General Exam		60			

<b>Resources</b>
Instructor's lecture notes1) Ertekin C. Santral ve Periferik EMG Anatomi-Fizyoloji-Klinik.İzmir 2006. 2) Bingöl AC, Çelik M, Gürtekin Y.Klinik nörofizyoloji laboratuvarları uygulama el kitabı. Türkiye Nörofizyoloji EEG-EMG Derneği İstanbul Şubesi. 1. baskı, İstanbul 2006. 3) Daube JR, Rubin DI. Clinical Neurophysiology, third edition. Oxford University press 2009.