

**Vocational School / Medical Laboratory Techniques**  
**2023 - 2024 Academic Year**  
**THE USE & MAINTENANCE of LABORATORY EQUIPMENT**  
**Syllabus**

Course Description					
Name	Code	Semester	T+A Hour	Credit	ECTS
THE USE & MAINTENANCE of LABORATORY EQUIPMENT	TLT1241980	Spring Semester	2+0	2	9
<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>	Assist.Prof. Neziha HACIHASANOĞLU ÇAKMAK				
<b>Name of Lecturer(s)</b>	Lect. Büşra ŞAHİN KURT				
<b>Assistant(s)</b>					
<b>Aim</b>	To give the knowledge on aims, usage and maintenance of devices which using in laboratory of biochemistry, genetics, pathology, histology.				
<b>Course Content</b>	This course contains; Glucotest,Bilirubinmeter,PCR-Polimerase Chain Reaction-1,PCR-2,Agarose Gel Electrophoresis,Centrifugation ,Types of Centrifugation,Autoanalyzer,pH meter,Waterbath and Sonicater,Microscobe,Heating Block, Shaker and Incubater,Autoclave,Sterilizater.				
<b>Course Learning Outcomes</b>			<b>Teaching Methods</b>	<b>Assessment Methods</b>	
1. Describe the devices they will encounter in the laboratory			16, 9	A, B, C	
2. Explains the working principles of laboratory devices			16, 9	A, B, C	
3. Performs cleaning and maintenance of the devices in the laboratory			16, 9	A, B, C	
<b>Teaching Methods</b>	16: Question - Answer Technique, 9: Lecture Method				
<b>Assessment Methods</b>	A: Traditional Written Exam, B: Short Answer Exam, C: Multiple-Choice Exam				
<b>Lecture Schedule</b>					
<b>Sequence</b>	<b>Topics</b>	<b>Preliminary Preparation</b>			
1	Glucotest				
2	Bilirubinmeter				
3	PCR-Polimerase Chain Reaction-1				
4	PCR-2				
5	Agarose Gel Electrophoresis				
6	Centrifugation				
7	Types of Centrifugation				
8	Autoanalyzer				
9	pH meter				
10	Waterbath and Sonicater				
11	Microscobe				
12	Heating Block, Shaker and Incubater				
13	Autoclave				
14	Sterilizater				
<b>Evaluation Methods</b>		<b>Weight(%)</b>			
Midterm Exam		40			
General Exam		60			

Resources
Lecturer's note.