AYDIN ADNAN MENDERES UNIVERSITY
AYDIN VOCATIONAL SCHOOL OF HEALTH SERVICES
MEDICAL SERVICES AND TECHNIQUES
MEDICAL LABORATORY TECHNIQUES
COURSE INFORMATION FORM

Course Title	History of Natural Sciences								
Course Code	ÇS310		Couse Level		Short Cycle (Associate's Degree)				
ECTS Credit	2	Workload	50 *(Hours)*	Theory	2	Practice	0	Laboratory	0
Objectives of the Course	The main objective is for the students to learn which important events, have influenced the development of science and chemistry, and to analyse the methods of scientists at important events in history								
Course Content	Important developments in the history of science will be discussed. This includes important developments in Physics introduced by Galileo and Newton. Important events in chemistry will make up more than half of the course and will include studies of scientists such as Dalton, Lavoisier and Mendeleev.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion								
Name of Lecturer(s)									

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	60

Recommended or Required Reading	
1	History of Science and Technology

Week	Weekly Detailed Course Contents	
1	Theoretical	The solar system: Copernicus, Tycho, Kepler
2	Theoretical	The first scientist: Galileo, Newton, Halley
3	Theoretical	Gases and steam: Boyle, Black, Watt
4	Theoretical	Chemistry: Cavendish, Priestley, Lavoisier
5	Theoretical	The atom: Dalton, Avogadro
6	Theoretical	Electrochemistry: Volta, Davy, Faraday
7	Theoretical	Light: Young, Maxwell, Einstein
8	Intermediate Exam	Midterm
9	Theoretical	Periyodik cetvel
10	Theoretical	The development of thermodynamics as a science
11	Theoretical	Cathode rays and the electron
12	Theoretical	x-rays, radioactivity and atomic structure
13	Theoretical	Emission spectra and the electronic structure of the atom
14	Theoretical	Bonding and molecular structure
15	Theoretical	Bonding and molecular structure

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	1	2	42
Midterm Examination	1	2	1	3
Final Examination	1	4	1	5
			Total Workload (Hours)	50
			[Total Workload (Hours) / 25*] = **ECTS**	2
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	1. Be able to describe the important events in the development of science
2	2. Be able to analyse the important contributions of scientist in the development of science.
3	3. Be able to summarise in good scientific style the important contributions of a scientist in the development of science.

4	Scientific Development
5	The lives of famous scientists

Programme Outcomes *(Medical Laboratory Techniques)*	
1	To be able to have sufficient back ground in medical laboratory techniques and medical laboratory branches (biochemistry, microbiology,parasitology,sitogenetiketc.);the ability to use theoretical and practical knowledge in these fields.
2	To be able to have the basic theoretical and practical knowledgeand other resources have been supported applications and tools based on secondary-level qualifications gained in the field of Medical Laboratory Techniques Program to-date text boks containing formations
3	To be able to have basic knowledge about structure and function of systems in human, to analyse these data on tissue, cell and diseases.
4	To be able to analyse the medical samples necessary for physicians by using tools, equipment and techniques at the diagnostic and the rapeutic laboratories of health agencies and evaluate the data.
5	To be able to use the medical laboratoy tools and equipments according to rules and technics, and make controls and maintenance of them
6	To be able to perform basic tests of related different medical laboratories, prepare solutions.
7	To be able to perform proper sample collection and transport procedures for the medical laboratory tests from the patient.
8	To be able to perform preanalytical sample preparation procedure, prepare inspection preparations, perform disinfection and sterilization
9	To be able to interpret and evaluate data, define and analyze problems, develop solutions based on research and proofs by using acquired basic knowledge and skills with in the field.
10	To be able to have knowledge about work organization and carry out related practice in medical laboratories
11	To be able to carry out laboratory safety protocols, take individual safety precaution and create safe laboratory environment.
12	To be able to gain the ability to apply by viewing and evaluating the processes related to his/her fields in public and private sector.
13	To be able to gain the awareness of the necessity of life long learning, ability to follow developments in science and technology and self-renewal.
14	To be able to help laboratory experts and medical scientists for their researches
15	To be able to be aware of individual and public health, environmental protection and job security issues, under standing the basic level of the relationship.
16	To be able to grasp principles of Atatürk and there volutions, to ensurenational, ethical, spiritual and cultural values, to adopt to universal and contemporary developments
17	To be able to communicate efficiently for medical service and speak Turkish efficiently.
18	To be able to communicate in English at basic level, utilize foreign language on occupational practice

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

	L1	L2	L3	L4	L5
P2	3	3	3	3	3
P13	5	5	5	5	5
P15	4	4	4	4	4
P18	3	3	3	3	3