



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		History of Natural Sciences							
Course Code		ÇS310		Course 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 Mendelev.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion					
Name of Lecturer(s)		Lec. Mert SOYSAL							

Assessment Methods and Criteria

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

Recommended or Required Reading

1	History of Science and Technology
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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 Imaging Techniques)

1	To be able to get information the working principles of Radiology, Nuclear Medicine and Radiotherapy devices, and distinguish their components, use these devices in accordance with operating instructions.
2	To be able to perform the procedures in accordance with the examination of Radiology and Nuclear Medicine imaging .
3	To be able to apply the radiotherapy treatment, planned by radiation physicist with instruction of radiotherapist.
4	To be able to develop and perform the film printing of the images that obtained by imaging techniques of Radiology, Nuclear Medicine
5	To be able to evaluate the images that obtained by imaging techniques of Radiology, Nuclear Medicine in terms of radiographic quality and takes the necessary measures.
6	To be able to know the medical and radiologic terminology, and pronounce and use them correctly
7	To be able to take the necessary measures in accordance with the rules of Radiation safety and protection from radiation, and apply them.
8	To be able to distinguish the anatomical structures on images, obtained by the conventional and cross-sectional imaging techniques of Radiology, Nuclear medicine.
9	To be able to communicate well with patient, their family and the hospital staff.
10	To be able to move with own professional duties, powers and responsibilities of the consciousness and apply the rules of professional ethics.
11	To be able to adapt to a multi-disciplinary team work.
12	To be able to have a basic knowledge of human physiology.
13	To be able to distinguish anatomical structures.
14	To be able to establish a cause-and-effect relationship between events.
15	To be able to have the ability of analytical thinking and problem solving.
16	To be able to apply the basic principles of first aid.
17	It has basic knowledge about human anatomy
18	Understanding the basic concepts and principles of physics while providing, in the medical field and in particular medical imaging students better understand the issues involving technical vocational courses
19	OHS 'basic concepts; work accidents, occupational diseases, occupational physicians, occupational safety specialist, İSGB, OSGB, hazard classes, risk assessment, OHS employee representatives is
20	Have basic knowledge about basic medical practices and makes applications

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

	L1	L2	L3	L4	L5
P6	2	2	2	2	2
P7	4	4	4	4	4
P10	2	2	2	2	2
P11	3	3	3	3	3
P14	3	3	3	3	3
P15	5	5	5	5	5
P18	3	3	3	3	3
P19	2	2	2	2	2

