



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Special Topics in Biology							
Course Code		FBÖ401		Course Level		First Cycle (Bachelor's Degree)			
ECTS Credit	5	Workload	125 (<i>Hours</i>)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course		Information on recent developments and current issues in biology							
Course Content		Genetically modified organisms (GMOs). Stem cell technology. The importance of organ transplants and organ donation. The importance of biology, society, science and technology. Development of drugs and cosmetic products, processes and effects on nature. Use of microorganisms in the elimination of environmentally harmful substances. Ready food, and the dangers of the preparation processes. Chemical substances (drugs, dyes, detergents), and biological effects. Close to the organisms in our environment (single-celled, house mites, insects) and health effects. Biological sensors. Genetic cloning. The use of nanotechnology in biology. Bioinformatics.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion, Project Based Study					
Name of Lecturer(s)									

Assessment Methods and Criteria

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

Recommended or Required Reading

1	Fikriye Polat. Biyolojide Özel Konular, Pegem A Yayınları, 2010
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Week	Weekly Detailed Course Contents	
1	Theoretical	Genetically modified organisms
	Preparation Work	
2	Theoretical	Stem cell technology
	Preparation Work	
3	Theoretical	Organ transplants and organ donation
	Preparation Work	
4	Theoretical	Importance of biology about community, science and technology
	Preparation Work	
5	Theoretical	Development process of medicine and cosmetics
	Preparation Work	
6	Theoretical	Effects of medicine and cosmetics on nature
	Preparation Work	
7	Theoretical	Use of microorganisms for the elimination of environmentally harmful substances
	Preparation Work	
8	Theoretical	Ready food, and the dangers of the preparation processes.
	Preparation Work	
9	Preparation Work	
	Intermediate Exam	Midterm exam
10	Theoretical	Chemical substances (drugs, dyes, detergents), and biological effects
	Preparation Work	
11	Theoretical	Organisms in our close environment (single-celled, house mites, insects)
	Preparation Work	
12	Theoretical	Biological sensors Genetic duplication
	Preparation Work	
13	Theoretical	Use of nanotechnology in biology
	Preparation Work	
14	Theoretical	Bioinformatics



14	Preparation Work	
15	Theoretical	Bioinformatics
	Preparation Work	
16	Final Exam	Final exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Assignment	14	0	2	28
Term Project	3	0	5	15
Reading	14	0	3	42
Midterm Examination	1	5	1	6
Final Examination	1	5	1	6
Total Workload (Hours)				125
[Total Workload (Hours) / 25*] = ECTS				5

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	Genetically modified organisms
2	Stem cell technology
3	Organ transplants and organ donation
4	Importance of biology about community, science and technology
5	Development process of medicine and cosmetics
6	Effects of medicine and cosmetics on nature
7	Food preparation processes and hazards.
8	Chemical substances' (drugs, dyes, detergents) biological effects
9	organisms in our close environment (single-celled, house mites, insects)
10	Comparison of biological sensors
11	
12	

Programme Outcomes (Science Teacher Education)

1	To be able to gain subject knowledge of profession in theory and practice in the learning process.
2	To be able to gain the competence of using the appropriate approach, strategy, method and technique for the instructional plans to be prepared in the learning process.
3	To be able to gain the skills of the teaching profession in the learning process.
4	To be able to implement teaching profession knowledge, skills, attitudes and habits related to the subject-matter in a real teaching and learning environment in the learning process.
5	To be able to comprehend contemporary approaches of education and the philosophy they are based on.
6	To be able to gain the basic skills such as comprehending, expressing, commenting, evaluating, being aware and enterprising, communicating, acknowledging the individual related to the subject-matter.
7	To be able to become individuals faithful to the Principles and Revolutions of Atatürk, be modern democratic, secular, protecting and developing one's country, being alive to the nation, respecting human rights, preserving the nature, not being discriminatory, giving importance to the traditions and customs, protecting the values
8	To be able to improve oneself in terms of sport, art and culture.
9	To be able to become individuals believing in lifelong learning.
10	To be able to gain the vision of being individuals who keep up with developments in social, economic, technological and scientific areas, who investigate the main reasons of World problems and try to contribute to the solutions of these problems.

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

	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10
P1	4	4	4	5	5	5	4	5	5	5

