



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Bioengineering							
Course Code		BYL337		Couse Level		First Cycle (Bachelor's Degree)			
ECTS Credit	3	Workload	78 (Hours)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course		Introducing the description and content of Bioengineering							
Course Content		Introduction to Bioengineering, the state of Bioengineering in Turkey and in the World, studies in this field, research objects, industrial applications, university-industry cooperation, product development and patent processes.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation)					
Name of Lecturer(s)									

Assessment Methods and Criteria

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

Recommended or Required Reading

1	Lecture Notes
2	Introduction to bioengineering ISBN:981-02-4023-6
3	Bioengineering, Science and Technology Committee 2009-2010
4	Career Development in Bioengineering and Biotechnology, Joachim H. Nagel ,2008
5	Bioengineering in cell and tissue research ISBN: 13:978-3-540-75409-1

Week	Weekly Detailed Course Contents	
1	Theoretical	Introduction to Bioengineering
2	Theoretical	History of Bioengineering
3	Theoretical	Bioengineering in Turkey and in the World
4	Theoretical	Sciences related with Bioengineering
5	Theoretical	Bioengineering applications in Biotechnology field
6	Theoretical	Bioengineering applications in Medical field
7	Theoretical	Bioengineering applications in Agricultural field
8	Theoretical	Bioengineering applications in Nutrition
9	Theoretical	Energy and environment applications
10	Theoretical	Bioengineering and nanotechnology
11	Theoretical	Bioreactors in bioengineering
12	Theoretical	Contribution of cell molecular biology to bioengineering
13	Theoretical	Bio-ethics
14	Theoretical	Product development and patent processes
15	Theoretical	Research and development programs

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	15	0	2	30
Assignment	16	0	1	16
Reading	15	1	1	30
Midterm Examination	1	0	1	1



Final Examination	1	0	1	1
Total Workload (Hours)				78
[Total Workload (Hours) / 25*] = ECTS				3
*25 hour workload is accepted as 1 ECTS				

Learning Outcomes

1	Able to comprehend the Bioengineering field
2	Able to comprehend the history and the state of Bioengineering in Turkey and in the World
3	Able to comprehend the Sciences related with Bioengineering
4	Able to comprehend the bioengineering applications in Biotechnology field
5	Able to comprehend the bioengineering applications in Medical field
6	Able to comprehend the bioengineering applications in Agricultural field
7	Able to comprehend the bioengineering applications in Nutrition
8	Able to comprehend the position of bioengineering in energy and environment applications
9	Able to establishing the relationship between bioengineering and nanotechnology
10	Able to comprehend the importance and position of bioreactors in bioengineering
11	Able to understand the contribution of cell molecular biology to bioengineering
12	Able to perform evaluations within Bio-ethics
13	Able to understand the product development and patent processes
14	Able to recognize the research and development programs

Programme Outcomes (German Language and Literature)

1	Students will have advanced knowledge in the field of German Language and Literature in the field of German Language and Literature.
2	To be able to understand the concepts, ideas and data related to German Language and Literature through scientific methods in which he / she has learned and learned; It provides suggestions that can be proved by scientific evidence, evidence or evidence.
3	To inform the German audience about the issues related to German Language and Literature; expresses his / her own thoughts, problems / problems, solution suggestions and methods in written and verbal way.
4	Students will be able to produce scientific studies to be accepted by the experts in the field of Languages, Literatures and Cultures.
5	It carries out advanced studies independently with learning, learning skills and critical thinking.
6	Develops strategic management and implementation plans in the field of German Language and Literature and evaluates the obtained results within the framework of quality processes and uses the obtained data in interdisciplinary studies.
7	Plans and manages the activities and projects for the professional development of the people he works with in the sense of social responsibility.
8	Students will be able to follow and use the German Language and Literature knowledge and gain the competency with their colleagues.
9	It has the competence to observe social, scientific and ethical values ??in the stages of collecting, interpreting and announcing data about German Language and Literature.
10	Uses and develops information and communication technologies with the knowledge of computer software and hardware required by German Language and Literature.
11	She is able to translate from German to Turkish and from German to German so that she can speak an equivalent language and grammar.
12	Obtains the basic professional knowledge related to the learning area.

