

BALIKESİR UNIVERSITY
ENGINEERING FACULTY
UNIVERSITY ELECTIVE COURSE INTRODUCTION FORM

Department/Programme	Environmental Engineering					
Course Unit Title	USD0000- Chemical Production Technologies					
Semester	Fall ☒			Spring ☐		
Language of Instruction	Turkish ☐			English ☒		
Credit	Theoretical 2		Application		Total Credits 2	
Number of ECTS Credits	3					
Mode of Delivery	University Elective Course			Regular Education		
Objectives of the Course	The aim of this course is to provide students with information about the basic concepts used in production processes, applied chemical technologies and methods, and to examine their applications in industry.					
Course Content	Examining chemical technologies in ceramics, glass, detergent, fertilizer, textile, cement, paint, polymer, petroleum, cosmetics, chemical substance production and wastewater treatment processes, ensuring the comprehension of equipment, terms and concepts used in the processes, and presenting industrial production examples in a way that facilitates understanding.					
Prerequisites and corequisites	There are no prerequisites for the course.					
Name of lecturer	Doç. Dr. Züriye GÜNDÜZ			mail : zyilmaz@balikesir.edu.tr		
Assistants	-					
Internship	-					
Resources	1-Chemical Technology, Andreas Jess and Peter Wasserscheid, Wiley. 2Chemical Engineer's Handbook, Robert H. Perry and Cecil H. Chilton, International Student Edition. 3-https://acikders.ankara.edu.tr/course/view.php?id=4664. 4- Kimya ve Kimya Mühendisliği Terimler Sözlüğü, Prof. Dr. Ali Rıza Berkem, Prof. Dr. Selahattin Gültekin, Türkiye Kimya Derneği Yayınları.					
Type of course unit	University Elective Course					
Planning learning activities and teaching methods	Theoretical explanation, midterm exam, final exam					
Assessment methods and criteria			ECTS allocated based on student workload			
In-term studies	Quantity	Percentage (%)	Activities	Quantity	Duration	Total work load (hours)
Mid-terms	1	40	Course Duration	14	2	28
Quizzes			Hours for offthe-c.r.stud	14	2	28
Assignment			Mid-terms	1	2	2
Attendance			Final Exams	1	2	2
Practice			Total work load (hours): 60			
Project			Number of ECTS credits: 3			

Learning outcomes	1. Learns chemical technologies and process stages in ceramics, glass, detergent, fertilizer, textile, cement, paint, polymer, petroleum, cosmetics, chemical substance production and wastewater treatment processes. 2. Understands the terms and concepts mentioned in the processes. 3. Sees and learns the equipment used in processes. 4. Learns chemical production technologies by examining industrial production examples.
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Weekly detailed course contents

Weeks	Topics	Prerequisites	Resources
1	Introduction to the course and explanation of its scope		Course Resources
2	Terms and concepts used in chemical technologies		Course Resources
3	Chemical technologies in ceramic production		Course Resources
4	Chemical technologies in glass production		Course Resources
5	Chemical technologies in detergent production		Course Resources
6	Chemical technologies in fertilizer production		Course Resources
7	Mid-term exam		
8	Chemical technologies in cement production		Course Resources
9	Chemical technologies in paint and textile production		Course Resources
10	Chemical technologies in polymer production		Course Resources
11	Chemical technologies in oil production		Course Resources
12	Chemical technologies in cosmetic production		Course Resources
13	Chemical technologies in the production of chemicals		Course Resources
14	Final exam		

Contribution of the Course to Program Outcomes	
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