YOZGAT BOZOK UNIVERSITY FACULTY OF ARTS AND SCIENCES

CHEMISTRY DEPARTMENT COURSE PLAN

Course Code	Course Title	Semester	Course Type (C/E)	T+A+L (Time/Week)	Credit	ECTS	Course Language
KİM723	Dyestuffs Chemistry	1-2	E	2+0+0		5	Turkish

COURSE INFORMATION

Course Catalog Description (Content)	Light, Characterization of light and information about color, Lambert-Beer Law, light absorption. Dyestuffs and pigments used in historical times. Paints used today. Dyestuffs according to their chemical structures, dyestuffs according to their application forms. Chemical structures of natural and artificial fibers and dyes applied to these fibers.
The Aim of the Course	Having knowledge about the chemical structures of the raw materials and fabrics used in dressing and clothing, which is the basic need of people, and the chemical structures of the dyestuffs used in the dyeing of these materials, who know how the industrial activities in this field affect the living and environmental health, who know the production difficulties and labor in this industrial area, and who are willing to contribute to this labor. and to educate students who respect knowledge. In addition, to ensure that they have an idea about the dyestuffs to be used in the protection and repair of cultural properties.
Course Level	Bachelor degree
Course Language	Turkish
Teaching method	(X) Formal ( ) Online ( ) Mixed/Hybrid
Teaching Staff of the Course	Prof. Dr. Mustafa SAÇMACI
Prerequisite Course(s) of the Course	
Learning Outcomes from the Course	**1.** Students will have information about the content of an organic dyestuff. **2.** Preliminary preparations for organic dyestuffs will be taught. **3.** Will have information about chromophore groups. **4.** Information on the use of dyestuffs according to their chemical structures will be given. **5.** Paints used today will be taught.

COURSE CONTENT

Week	Theory	Practice/Laboratory
1	Light	
2	Characterization of light	
3	Information about color	
4	Lambert-Beer Law	
5	Light absorption	
6	Dyestuffs used in historical times	
7	Pigments used in historical ages	
8	Dyestuffs according to their chemical structures	
9	Dyestuffs according to application forms	
10	Chemical structures of natural and artificial fibers	
11	Dyes applied to fibers	
12	Chemical content of dyes used today	

13	Synthesis steps of dyes used today	
14	Synthesis steps of dyes used today	
15	Final Exam	

Course Learning Resources

1. N.N. Mahapatra, Textile Dyes, Woodheat Publishing India PVT Ltd., CRC Press, T&F Group, 2016.
2. G. Ebner, D. Schelz, Textilfärberei und Farbstoffe, Springer-Verlag, 1989.
3. M. Tutak, Dyestuff Chemistry, lecture notes.
4. I. Başer, Y. İnanıcı, Marmara University Publications Publication No:482, Technical Education Faculty publication no:2.

ASSESSMENT CRITERIA

Work Activities During the Semester	Number	Contribution
Homework	1	%30
Practice		
Forum/ Discussion Application		
Short Exam (Quiz)	2	%35
Ratio Of Semester Studies To Semester Success (%)		%40
Ratio of Final to Success (%)	1	%60
Total		%100

COURSE WORKLOAD TABLE

Activity	Total Weeks	Duration (Weekly Hours)	Total Workload
Theory	14	2	28
Practice			
Forum/ Discussion Application			
Reading	14	3	42
Internet Scanning, Library Study	14	2	28
Material Design, Application			
Report Preparation			
Presentation Preparation			
Presentation			
Final Exam	1	2	2
Preparation for the Final Exam	4	6	24
Other(s) (Specify: … …. ……..)			
Total Workload			
Total Workload / 25 (s)			124/25
ECTS Credits of the Course			124/25≅5
Note: The workload of the course will be determined by the instructor on a per-course basis.			

PROGRAM LEARNING OUTPUTS CONTRIBUTION LEVELS

No	Program Learning Outputs	1	2	3	4	5
1	Gains extensive knowledge about the basic chemical properties of matter and uses this knowledge in daily life, industrial scale, and practical chemistry and shares them with the society.				**X**	
2	Performs experiments, collects data, interprets, evaluates results, defines problems parallel to current technological developments, produces solutions against problems encountered in the laboratory.		**X**			
3	Calculates and processes chemical information and data.			**X**		

4	Applies her/his knowledge and understanding of chemistry to the solution of unconventional qualitative and quantitative problems.				**X**	
5	Defines and comprehends chemical concepts and theories in Inorganic Chemistry, Organic Chemistry, Physical Chemistry, Analytical Chemistry, Biochemistry.				**X**	
6	Can conduct research in the light of scientific data on any subject in the field of chemistry.					**X**
7	Writes, presents, discusses scientific material, and presents it orally to a knowledgeable audience.			**X**		
8	Brings a chemical approach to the solution of environmental problems, makes environmental analyzes and reports.		**X**			
9	Knows a foreign language at a level to read and understand the basic terms and processes of the chemist profession.			**X**		
10	Can use computer software and information and communication technologies at the level required by the field.				**X**	
11	Adapts and transfers the knowledge gained in the field to secondary education.			**X**		
12	Apart from the field of chemistry, she/he gains knowledge in different branches of science that she feels close to.				**X**	
13	Carries out a study independently, makes group work and gains the awareness of taking responsibility.				**X**	
14	They can develop a positive attitude towards lifelong learning and constantly renew their professional knowledge and skills.				**X**	
15	Have sufficient awareness of the universality of social rights, social justice, quality culture and protection of cultural values, environmental protection, occupational health and safety.			**X**		