



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Organic Dyes							
Course Code		KİM524		Couse Level		Second Cycle (Master's Degree)			
ECTS Credit	6	Workload	156 (<i>Hours</i>)	Theory	3	Practice	0	Laboratory	0
Objectives of the Course		Learning of some features of the dyes chemical structure, synthesis							
Course Content		General structures of colorants , properties, applications and synthesis routes.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion, Problem Solving					
Name of Lecturer(s)		Assoc. Prof. Fatih EYDURAN							

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	20
Final Examination	1	60
Assignment	4	20

Recommended or Required Reading

1	Zollinger, H., Color Chemistry, Wiley-VCH, Zürich, 1991
2	Gordon P.F, Gordon P., Orgaic Chemistry in Color, Springer-Verlag, ew York, 1983.
3	Christie R.M., Colour Chemistry, Royal Society of Chem, UK, 2001

Week	Weekly Detailed Course Contents	
1	Theoretical	Colorants, color and properties
2	Theoretical	Colorants classes and their applications
3	Theoretical	Synthesis of the dyes intermediate compounds
4	Theoretical	Synthesis and properties of Azo dyes
5	Theoretical	Synthesis and properties of Anthraquinone dyes
6	Theoretical	Synthesis and properties of Vat and Indigo dyes
7	Theoretical	Synthesis and properties of Phthalocyanine dyes
8	Theoretical	Synthesis and properties of Polymethine dyes
9	Preparation Work	An overview of the course topics
	Intermediate Exam	Midterm
10	Theoretical	Aryl-carbonium dyes
11	Theoretical	Nitro and sulfur dyes
12	Theoretical	Organic and Inorganic Pigments
13	Theoretical	Functional Dyes and Pigments
14	Theoretical	High technologic Dyes and Pigments
15	Theoretical	Dyes having biological significance
	Preparation Work	An overview of the course topics
16	Final Exam	Term exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	3	42
Assignment	4	15	0	60
Midterm Examination	1	25	2	27



Final Examination	1	25	2	27
Total Workload (Hours)				156
[Total Workload (Hours) / 25*] = ECTS				6
*25 hour workload is accepted as 1 ECTS				

Learning Outcomes

1	to be able to recognize the concept of Dye
2	to be able to find out the route of the basic chemical synthesis of dyes
3	to be able to recognize the industrial uses of dyes.
4	to be able to define the desired properties of dyes.
5	To be able to the classes of dyes..

Programme Outcomes (Chemistry Master)

1	To be able to gain proficiency in depths and analysis by statistical methods in the same or a related area depending on the undergraduate competence,.
2	To be able to use the knowledge of his/her field and the skills to solve problems and/or applications in interdisciplinary research.
3	To be able to adopt to evaluate the information and skill his/her field by critical approach.
4	To be able to evaluate the effect of important persons, case and fact on his/her field applications.
5	To be able to gain the ability to discuss write and orally present to a group of literate listener.
6	To be able to communicate orally and written in a foreign language at least at European language B2 level.
7	To be able to use computer programs related to his/her field and have skills for informatics communication.
8	To be able to be careful in protecting social, scientific and cultural ethics in collection data, application and presentation.
9	To be able to develop strategic, political and application plans in his/her field and may evaluate the outcomes in quality periods.

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

	L1	L2	L3	L4	L5
P2	4	4	4	4	4
P3	5	5	5	5	5
P4	3	3	3	3	3
P5	2	2	2	2	2
P6	3	3	3	3	3
P7	2	2	2	2	2
P8	5	5	5	5	5
P9	5	5	5	5	5

