



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Polymeric Organic Coating Materials							
Course Code		KİM527		Couse Level		Second Cycle (Master's Degree)			
ECTS Credit	6	Workload	150 (<i>Hours</i>)	Theory	3	Practice	0	Laboratory	0
Objectives of the Course		To teach basic concepts and methods in organic surface coatings technology. To provide current and in-depth knowledge on organic surface coatings and technology.							
Course Content		Organic binders, natural resins, cellulosic resins, vinyl and acrylic polymers, silicone surface coatings, polyurethane and epoxy surface coatings, special organic surface coatings, film preparation techniques, analysis and mechanical testing of organic coatings.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion, Case Study, Project Based Study					
Name of Lecturer(s)		Prof. İlknur BABAHAN BİRCAN							

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	20
Final Examination	1	60
Assignment	2	10
Term Assignment	1	10

Recommended or Required Reading

1	Oldring, P. K. T. & Hayward, G. (1987). A Manual For Resins For Surface Coating (Volume 1, 2, 3). London: SITA Technology.
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Week	Weekly Detailed Course Contents	
1	Theoretical	Introduction
2	Theoretical	Organic Binders
3	Theoretical	Natural Resins
4	Theoretical	Cellulosic Resins
5	Theoretical	Vinyl Polymers
6	Theoretical	Acrylic polymers
7	Theoretical	Silicone and polyurethane surface coatings
8	Theoretical	Midterm
9	Theoretical	Epoxy resins
10	Theoretical	Special organic surface coatings
11	Theoretical	Organic and inorganic pigments
12	Theoretical	Film Preparation Techniques
13	Theoretical	Structure analysis of organic coatings
14	Theoretical	Mechanical tests of organic coatings
15	Theoretical	Paint production, surface preparation and applications
16	Theoretical	Final exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	3	42
Assignment	2	12	0	24
Term Project	1	25	0	25
Reading	1	0	20	20
Quiz	1	4	1	5
Midterm Examination	1	10	2	12



Final Examination	1	20	2	22
Total Workload (Hours)				150
[Total Workload (Hours) / 25*] = ECTS				6
*25 hour workload is accepted as 1 ECTS				

Learning Outcomes

1	To learn definition of organic surface coating materials
2	To learn chemical structure and physical properties of organic surface coating materials.
3	To learn industrial organic coating materials.
4	To learn film preparation techniques
5	To learn organic coatings and mechanical tests

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
P1	5	5	5	5	5
P2	5	5	5	5	5
P3	5	4	4	4	4
P5	5	5	5	5	5
P8	4	4	4	4	4

