AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Metal Organic Compounds								
Course Code	KİM534		Couse Level	Second Cycle (Master's Degree)					
ECTS Credit	6	Workload	150 *(Hours)*	Theory	3	Practice	0	Laboratory	0
Objectives of the Course	Recognition of metal-organic compounds, to be known the nature and properties of metal-organic compounds.								
Course Content	Recognition of metal-organic compounds, gaining the knowledge of industrial applications.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion, Problem Solving								
Name of Lecturer(s)	Assoc. Prof. Rukiye FIRINCI, Prof. Muhammet Emin GÜNAY								

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Midterm Examination	1	20
Final Examination	1	60
Quiz	4	10
Assignment	4	10

Recommended or Required Reading	
1	Organometallics, Christoph Elschenbroich ; translated by Jose Oliveira and Christoph Elschenbroich, Weinheim : Wiley-VCH, c2006.

Week	Weekly Detailed Course Contents	
1	Theoretical	Organometallic compounds
2	Theoretical	Metal alkoxides
3	Theoretical	Usage, properties and production of organolithium compounds
4	Theoretical	Grignard reagents
5	Theoretical	Organoboron compounds
6	Theoretical	Organoaluminum compounds
7	Theoretical	Organotin compounds
8	Theoretical	Organosilicon compounds
9	Theoretical	Organoarsenic compounds
10	Preparation Work	General review on topics
	Intermediate Exam	Midterm Exam
11	Theoretical	Organotitanium compounds
12	Theoretical	Organomercury compounds
13	Theoretical	Organolead compounds
14	Theoretical	Phosphine complexes
15	Theoretical	Arene complexes
16	Preparation Work	General review on topics
	Final Exam	Final Exam

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	3	42
Assignment	4	6	0	24
Reading	1	0	30	30
Quiz	4	4	1	20
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 be able to recognize organometallic compounds.
2	to be able to define the differences between the metal-organic and organometallic compounds.
3	to be able to acquire knowledge on the application areas of metal-organic compounds.
4	To be able to recognize the developments in catalytic chemistry.
5	To have knowledge about phosphine and arene complexes

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	5	5	5	5
P5	3	3	3	3	3
P9	5	5	5		5