

AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

| Course Title | Inorganic Cyclic Comp | ounds | | | | | |
|--|-----------------------|--|-------|--------------------------------|----------------|------------------|---------|
| Course Code | KİM536 | Couse L | .evel | Second Cycle (Master's Degree) | | | |
| ECTS Credit 6 | Workload 156 (Ho | ours) Theory | 3 | Practice | 0 | Laboratory | 0 |
| Objectives of the Course examination of some of the basic elements in parallel with the organic chemistry group in the structure of the cyclic inorganic compounds. | | | | | | | |
| Course Content Borazines, Borazine compounds, Boron-Cage Structures, Carboranes, Cyclic Phosphazenes, Cyclic Phos | | | | | | | |
| Work Placement N/A | | | | | | | |
| Planned Learning Activities and Teaching Methods Explanatio | | | | tion), Discussion | on, Individual | Study, Problem S | Solving |
| Name of Lecturer(s) | Prof. Nursabah SARIK | Name of Lecturer(s) Prof. Nursabah SARIKAVAKLI | | | | | |

| Assessment Methods and Criteria | | | | | |
|---------------------------------|----------|----------------|--|--|--|
| Method | Quantity | Percentage (%) | | | |
| Midterm Examination | 1 | 40 | | | |
| Final Examination | 1 | 60 | | | |

| Recommended or Required Reading | | | | | |
|---------------------------------|--|--|--|--|--|
| 1 | Tunalı, N. K. ve Özkar, S., (1999)Anorganik kimya, Gazi Kitabevi, Ankara | | | | |
| 2 | Shriver D.F., Atkins P. W., Langford C. H., (1991) Inorganic Chemistry, Oxford Chemistry | | | | |
| 3 | Miessler G.L., Tarr D.A., (1999) Inorganic Chemistry, PrenticeHall | | | | |
| 4 | Housecroft C.E., Sharpe A.G., (2001) Inorganic Chemistry, 1st Ed, PrenticeHall | | | | |
| 5 | Huheey J.E., Keiter E.A., Keiter R.L., (1993) Inorganic Chemistry, 4th Ed., Harper Collins | | | | |

| Week | Weekly Detailed Course Contents | | | | |
|------|---------------------------------|--|--|--|--|
| 1 | Theoretical | Borazines | | | |
| 2 | Theoretical | Borazine compounds | | | |
| 3 | Theoretical | Boron-Cage Structures | | | |
| 4 | Theoretical | Carboranes | | | |
| 5 | Theoretical | Cyclic Phosphazenes | | | |
| 6 | Theoretical | Cyclic Nitrogen-Sulfur Compounds (Thiazenes) | | | |
| 7 | Theoretical | Homocyclic systems | | | |
| 8 | Intermediate Exam | Midterm Exam | | | |
| 9 | Theoretical | Heterocyclic Systems | | | |
| 10 | Theoretical | Crown Ethers | | | |
| 11 | Theoretical | Complexes of Crown Ethers | | | |
| 12 | Theoretical | Macrocyclic Ligands | | | |
| 13 | Theoretical | Macrocyclic Ligand Complexes | | | |
| 14 | Theoretical | Student Presentations | | | |
| 15 | Theoretical | Student Presentations | | | |
| 16 | Final Exam | Final Exam | | | |

| Workload Calculation | | | | |
|----------------------|----------------------|----|----------|----------------|
| Activity | Quantity Preparation | | Duration | Total Workload |
| Lecture - Theory | 14 | 0 | 3 | 42 |
| Assignment | 4 | 0 | 9 | 36 |
| Reading | 14 | 0 | 1 | 14 |
| Midterm Examination | 1 | 30 | 2 | 32 |



| Final Examination | 1 | | 30 | 2 | 32 |
|---|----------------------------|--|-------------------|-----------------------------|----|
| | Total Workload (Hours) 156 | | | 156 | |
| | | | [Total Workload (| Hours) / 25*] = ECTS | 6 |
| *25 hour workload is accepted as 1 ECTS | | | | | |

| Learn | ing Outcomes |
|-------|--|
| 1 | to be able to recognize the basic concepts of borazin and compounds of borazines |
| 2 | to be able to find out the Bor-cage structures, carboranes, cyclic phosphazenes, thiazenes. |
| 3 | to be able to recognize the homocyclic and heterocyclic systems, macrocyclic ligands and crown ethers. |

4 to be able to apply crown ethers and macrocyclic ligands to the complexes.

5 Examine articles on inorganic ring compounds

Programme Outcomes (Chemistry Master)

- 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,.
- 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.
- 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 | 4 | 4 | 4 | 4 | 4 |
| P2 | 4 | 4 | 4 | 4 | 4 |
| P3 | 4 | 4 | 4 | 4 | 4 |
| P5 | 4 | 4 | 4 | 4 | 4 |

