

YOZGAT BOZOK UNIVERSITY FACULTY OF ARTS AND SCIENCES CHEMISTRY DEPARTMENT COURSE PLAN

| Course | e C | ourse Title | Semes ter | Course Type | T+A+L (Time/Week) | Credi t | ECTS | Course Language | | |
|--------------------------------------|---|---------------------|---|--------------------|----------------------|------------|------|--------------------|--|--|
| KİM35 | 1 Orga | nic Chemistry-I | Autumn | (C/E) C | 4+0+0 | 4 | 6 | English | | |
| | | | | INFORMAT | | | | | | |
| Course Catalog Description (Content) | | | Gain knowledge about the basics of Organic Chemistry. Understands the importance of organic compounds. Learns hydrocarbons and their reactions. Writes the synthesis methods of organic compounds. Comprehends the physical and chemical properties of alcohols and ethers. | | | | | | | |
| The Aim of the Course | | | To teach the basics of Organic Chemistry and to give information about how organic reactions proceed. | | | | | | | |
| Course Level | | | Master | | | | | | | |
| Course Language | | | English | | | | | | | |
| Teaching method | | | (X) Formal | () Online | e () Mixed/Hyb | rid | | | | |
| Teaching Staff of the Course | | | Prof. Dr. Mustafa SAÇMACI Prof. Dr. Ş.Hakan ÜNGÖREN Prof. Dr. İrfan KOCA Dr. Öğr. Üyesi İbrahim Evren KIBRIZ | | | | | | | |
| Prereque | uisite Course | e(s) of the | - | | - | | | | | |
| Learning Outcomes from the Course | | | -Gain knowledge about the basics of Organic Chemistry. -Understands the importance of organic compounds. -Learns hydrocarbons and their reactions. -Writes the synthesis methods of organic compounds. - Comprehends the physical and chemical properties of alcohols and ethers. | | | | | | | |
| | | | CC | URSE CON | ITENT | | | | | |
| Week | Theory | | | Pra | actice/Laboratory | | | | | |
| 1 | | o Organic Chemisti | • | | | | | | | |
| 2 | Molecular structures and physical properties of alkanes | | | alkanes | | | | | | |
| 3 | Chemical reactions of alkanes | | | | | | | | | |
| 4 | Molecular stru | uctures and physica | al properties of | alkenes | | | | | | |
| 5 | Obtaining alkenes and their chemical reactions | | | | | | | | | |
| 6 | Structures and properties of alkynes | | | | | | | | | |
| 7 | Methods and reactions of obtaining alkynes | | | | | | | | | |
| 8 | Molecular structures of organic halogen compunds | | | nds | | | | | | |
| 9 | Chemical reactions of organic halogen compounds | | | nds | | | | | | |
| 10 | Molecular structures of alcohols | | | | | | | | | |
| 11 | Physical properties of alcohols and dialcohols | | | | | | | | | |
| 12 | Chemical reactions of alcohols | | | | | | | | | |
| 13 | Molecular stru | uctures and proper | ies of ethers | | | | | | | |



| 14 | Chemical reactions of ethers |
|----|------------------------------|
| 15 | Final Exam |

Course Learning Resources

- Celal Tüzün, Organic Chemistry
 Fessenden, Organic Chemistry
- 3. Solomon, Organic Chemistry
- 3.
- 4.

| 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 (%) | | %60 | | | |
| Total | | %100 | | | |

| | COURSE WORKLOAD | ΓABLE | | | |
|--|---------------------------------|-------------------------|----------------|---|--|
| Activity | Total Weeks | Duration (Weekly Hours) | Total Workload | | |
| Theory | 14 | 4 | 56 | | |
| Practice | | | | | |
| Forum/ Discussion Application | 5 | | | | |
| Reading | 4 | 8 | 32 | | |
| Internet Scanning, Library Study | 14 | 2 | 28 | | |
| Material Design, Application | א עכ | | | | |
| Report Preparation | | | | | |
| Presentation Preparation | | | | | |
| Presentation | | A / | 7 | | |
| Final Exam | 1 | 2 | 2 | | |
| Preparation for the Final Exam | 4 | 8 | 32 | | |
| Other(s) (Specify:) | | | | | |
| Total Workload | | | | | |
| Total Workload / 25 (s) | 150/25 | | | | |
| ECTS Credits of the Course | 150/25≌6 | | | | |
| Note: The workload of the course will be | determined by the instructor of | on a per-course basis. | | | |
| PROGRAM I | EARNING OUTPUTS CON | JTRIRLITION I EVELS | | | |
| No Program Learning Outputs | | 1 2 | 3 4 | 5 | |
| Gains extensive knowledge about | out the basic chemical proper | ties of | | Х | |



matter and uses this knowledge in daily life, industrial scale, and

practical chemistry and shares them with the society.

| 2 | Performs experiments, collects data, interprets, evaluates results, defines problems parallel to current technological developments, | X | | | | |
|----|--|---|---|---|---|---|
| 3 | produces solutions against problems encountered in the laboratory. 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. | | | | | Х |
| 6 | Can conduct research in the light of scientific data on any subject in the field of chemistry. | | | | Х | |
| 7 | Writes, presents, discusses scientific material, and presents it orally to a knowledgeable audience. | | | Х | | |
| 8 | Brings a chemical approach to the solution of environmental problems, makes environmental analyzes and reports. | | Х | | | |
| 9 | Knows a foreign language at a level to read and understand the basic terms and processes of the chemist profession. | | | Х | | |
| 10 | Can use computer software and information and communication technologies at the level required by the field. | | Х | | | |
| 11 | Adapts and transfers the knowledge gained in the field to secondary education. | | | Х | | |
| 12 | Apart from the field of chemistry, she/he gains knowledge in different branches of science that she feels close to. | | Х | | | |
| 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. | | | Х | | |
| 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. | | Х | | | |

