



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

| Course Code | Course Title | Semester | Course Type (C/E) | T+A+L (Time/Week) | Credit | ECTS | Course Language |
|-------------|-------------------|----------|-------------------|-------------------|--------|------|-----------------|
| KİM113 | General Physics I | Fall | C | 2+2+2 | | 4 | Turkish |

COURSE INFORMATION

| | |
|---|---|
| Course Catalog Description (Content) | Physical quantities, vectors, particle kinematics and dynamics, work-energy and conservation laws, collisions, kinematics and dynamics of rotating bodies, equilibrium of rigid bodies, oscillations, gravitation, fluid mechanics. |
| The Aim of the Course | 1. In the field of physics textbooks that contain updated information, practical support and tools, and other scientific sources to have advanced theoretical and practical knowledge, 2. Use the information gained in the field of advanced theoretical and applied, 3. Alanındaki concepts and ideas of scientific methods to examine, interpret, and evaluate data, identify problems, analyze them, develop solutions based on scientific evidence, 4. Access to new knowledge in the field of physics and technology, 5. Use information from their own field of physics courses. |
| Course Level | Bachelor degree |
| Course Language | Turkish |
| Teaching method | (X) Formal () Online () Mixed/Hybrid |
| Teaching Staff of the Course | Related Lecturers |
| Prerequisite Course(s) of the Course | |
| Learning Outcomes from the Course | 1. In the field of physics textbooks that contain updated information, practical support and tools, and other scientific sources to have advanced theoretical and practical knowledge, 2. Use the information gained in the field of advanced theoretical and applied, 3. Concepts and ideas in the field of scientific methods to examine, interpret, and evaluate data, identify problems, analyze them, develop solutions based on scientific evidence, 4. Access to new knowledge in the field of physics and technology, 5. Use information from their own field of physics courses. |

COURSE CONTENT

| Week | Theory | Practice/Laboratory |
|------|--|---------------------|
| 1 | Units, Physical Quantities, Geometry and Physics | |
| 2 | Vectors | |
| 3 | One-dimensional motion | |
| 4 | Two-dimensional motion | |
| 5 | Newton's Laws of Motion | |
| 6 | Circular Motion | |
| 7 | Business Energy | |
| 8 | Potential Energy and Energy Conservation | |
| 9 | Potential Energy and Energy Conservation | |
| 10 | Linear Momentum and Collisions | |

| | | |
|----|--------------------------------|--|
| 11 | Linear Momentum and Collisions | |
| 12 | Rotation of a Rigid Body Hard | |
| 13 | Angular Momentum and Torque | |
| 14 | Angular Momentum and Torque | |
| 15 | Final Exam | |

Course Learning Resources

1. Physics for Science and Engineering I (Serway, Palme Publishing)
2. Fundamentals of Physics I (Arkadaş Publishing)

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 (%) | 1 | %60 |
| Total | | %100 |

COURSE WORKLOAD TABLE

| Activity | Total Weeks | Duration (Weekly Hours) | Total Workload |
|-----------------------------------|-------------|-------------------------|------------------|
| Theory | 14 | 2 | 28 |
| Practice | | | |
| Forum/ Discussion Application | | | |
| Reading | 14 | 2 | 28 |
| Internet Scanning, Library Study | 14 | 2 | 28 |
| Material Design, Application | | | |
| Report Preparation | | | |
| Presentation Preparation | | | |
| Presentation | | | |
| Final Exam | 1 | 2 | 2 |
| Preparation for the Final Exam | 2 | 7 | 14 |
| Other(s) (Specify:) | | | |
| Total Workload | | | |
| Total Workload / 25 (s) | | | 100/25 |
| ECTS Credits of the Course | | | 100/25 \cong 4 |

Note: The workload of the course will be determined by the instructor on a per-course basis.

PROGRAM LEARNING OUTPUTS CONTRIBUTION LEVELS

| No | Program Learning Outputs | 1 | 2 | 3 | 4 | 5 |
|----|---|---|---|---|---|---|
| 1 | Gains extensive knowledge about the basic chemical properties of matter and uses this knowledge in daily life, industrial scale, and practical chemistry and shares them with the society. | X | | | | |
| 2 | Performs experiments, collects data, interprets, evaluates results, defines problems parallel to current technological developments, produces solutions against problems encountered in the laboratory. | X | | | | |
| 3 | 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. | X | | | | |
| 6 | Can conduct research in the light of scientific data on any subject in the field of chemistry. | X | | | | |
| 7 | Writes, presents, discusses scientific material, and presents it orally to a knowledgeable audience. | X | | | | |
| 8 | Brings a chemical approach to the solution of environmental problems, makes environmental analyzes and reports. | X | | | | |
| 9 | Knows a foreign language at a level to read and understand the basic terms and processes of the chemist profession. | X | | | | |
| 10 | Can use computer software and information and communication technologies at the level required by the field. | X | | | | |
| 11 | Adapts and transfers the knowledge gained in the field to secondary education. | X | | | | |
| 12 | Apart from the field of chemistry, she/he gains knowledge in different branches of science that she feels close to. | X | | | | |
| 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. | X | | | | |
| 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. | X | | | | |

Bozok