

| Course Information | | | | | | | | |
|--------------------------|--------------------------------|---|---|---|------|-------------|----------------------------|---------------|
| Course Code | T | P | L | C | ECTS | Type C/E | Language TR/ENG etc. | Year/Semester |
| KİM1013 | 0 | 0 | 2 | 1 | 2 | C | TR | 1/FALL |
| Course Name (Turkish) | Genel Kimya Laboratuvarı-I | | | | | | | |
| Course Name (English) | General Chemistry Laboratory-I | | | | | | | |

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|---|---|--------------------------------|---------------|------|
| Unit/Program | Physics Department/Undergraduate Program | | | |
| Course Prerequisite | No | | | |
| Course Objectives | The aim of this course is to give information about the basic experimental studies and laboratory techniques used in chemistry. | | | |
| Course Outline | Basic Chemistry Experiments | | | |
| Textbook/ Material / Resources | General Chemistry Laboratory Experiments Test Sheet | | | |
| Internship Status | | | | |
| Course Precedents | | | | |
| University Name | Program Name | Course Name | T-P-L-C; ECTS | Type |
| Izmir University of Technology | Physics | General Chemistry Laboratory I | 0-0-2-1, 2 | C |
| Balıkesir University | Physics | General Chemistry Laboratory I | 0-0-2-1, 2 | C |
| Eskişehir Osmangazi University | Physics | General Chemistry Laboratory I | 0-0-2-1, 2 | C |
| The instructor who proposed the course (Title, Name and Surname) | | | Signature | |
| | | | | |
| Instructors who can teach the course (Title, Name and Surname) | | | Signature | |
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Academic justification for the opening of the course? (The effect of course outcomes on program outcomes, etc.)

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Brief explanation of the course (theoretical lecture, applications, laboratory, studio, off-campus activity, using software, etc.)

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External Stakeholder Opinions About the Course (It is expected that the opinions to be obtained from the business world that will employ your graduates or from real or legal persons outside the University who have expertise on the subject of the course will be specified. Proof documents must be attached to this form.)

| Stakeholder Name | Opinion (It should be given as a summary, it should not exceed two lines.) |
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| Weekly Course Content Distribution | | |
|------------------------------------|---|---|
| Week | Theory | Application/Laboratory |
| 1 | Basic Laboratory Principles | |
| 2 | Safety in the Laboratory | |
| 3 | Accidents that may occur in the laboratory and how to respond to them | |
| 4 | | Laboratory Supplies |
| 5 | | Volume Measurement and Weighing Process in the Laboratory |
| 6 | | Cleaning Glass Materials |
| 7 | | Preparation of Washing Solutions |
| 8 | | Basic Physical and Chemical Processes |
| 9 | Midterm Exam | |
| 10 | | Heating and cooling |
| 11 | | Law of Conservation of Mass |
| 12 | | Separation Methods |
| 13 | | Solutions |
| 14 | | Equivalent Weight of Magnesium |
| 15 | Finale | |
| 16 | | |

| Assessment | | | |
|---------------------|---------------|--------|-----------------------------------|
| Evaluation Criteria | Activity | Custom | Contribution to Success Grade (%) |
| | Midterm Exams | 1 | 40 |
| | Quizzes | | |
| | Assignments | | |
| | Projects | | |
| | Term Paper | | |
| | Laboratory | | |
| | Other | | |
| | Final Exam | 1 | 60 |
| | Sum: | | 100 |
| Remarks | | | |

| Content Design and Subject Weight (%) | Mathematics and Basic Sciences | 100 |
|---------------------------------------|--------------------------------|-----|
| | Engineering Sciences | |
| | Social Sciences | |
| | Health Sciences | |
| | Educational Sciences | |
| | Culture and Art Sciences | |
| | Design Information | |

| Workload (ECTS) Calculation | | | |
|--|--------|------------------|------------------------|
| Events | Number | Duration (Hours) | Total workload (Hours) |
| Fieldwork | | | |
| Midterm Exam Application | 1 | 1 | 1 |
| Self-Study (including pre-class and exam preparation) | 3 | 8 | 24 |
| Make-up Exam | 1 | 1 | 1 |
| Experiment and Observation | | | |
| Class Participation (Theory) | | | |
| Homework | | | |
| Final Exam Practice | 1 | 1 | 1 |
| Laboratory | 14 | 2 | 28 |
| Article Review | | | |
| Writing an Article | | | |
| Reading | | | |
| Case Study | | | |
| Performance | | | |
| Problem Solution | | | |
| Project Preparation | | | |
| Project Submission | | | |
| Quiz | | | |
| Report Preparation | | | |
| Submitting Reports | | | |
| Role/Drama Work | | | |
| Seminar | | | |
| Oral Exam | | | |
| Team/Group Work | | | |
| Argument | | | |
| Application/Practice | | | |
| Other | | | |
| TOTAL WORKLOAD: | | | 55 |
| ECTS CREDITS OF THE COURSE: (The number obtained as a result of Total Workload/25 is calculated by rounding to the whole number.) | | | 2 |

| The Relationship Between Course Learning Outcomes and Program Outcomes | | | | | | | | | | | | |
|--|--|-----------------------|---|---|---|---|---|---|---|---|----|----|
| Learning Outcomes (LO) (Course Outcomes) | | Program Outcomes (PO) | | | | | | | | | | |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 1 | Comprehension of the fundamentals of chemistry | 1 | 1 | 1 | 1 | 1 | 1 | 5 | 5 | 5 | 1 | 1 |
| 2 | Ability to apply basic knowledge of Chemistry, Mathematics and Physics to Chemistry problems | 5 | 5 | 5 | 5 | 3 | 1 | 5 | 5 | 5 | 1 | 1 |
| 3 | Ability to identify, define, analyze and solve problems in chemistry and related fields | 3 | 3 | 3 | 5 | 3 | 1 | 5 | 5 | 5 | 1 | 1 |

Organizer: Assoc. Prof. Dr. Ersin PEKDEMİR

Preparation Date: 20.05.2024