

CHEM 106 General Chemistry Laboratory**SUMMER'26****Syllabus and Course Policies**

Semester	Credits	ECTS	C + P + L	Prerequisites	Corequisites
3	2	4	1+0+3	-	CHEM 102

Instructor:

Dr. Filiz Emlik filiz.emlik@bogazici.edu.tr

Office: KB 6, Chemistry Department

Office Hour: by appointment via email

Lecture/Lab Hours:**CHEM 106**

Lecture: M 13.00-13:50 KB126 **Lab:** M 14.00- 17.00 (KB318)

T 13.00-13:50 NH202 **Lab:** T 14.00- 17.00 (KB318)

Textbook:

Laboratory Experiments in General Chemistry, Eliza KALVO.

Course Description and Objectives:

This course is designed to reinforce the fundamental concepts of general chemistry through hands-on laboratory experiments. The laboratory component complements CHEM 102 and provides students with practical experience in chemical measurements, data analysis, and scientific reporting.

By the end of this course, students will be able to:

1. Apply principles of thermochemistry, chemical kinetics, chemical equilibrium, acid–base chemistry, solubility, and electrochemistry through laboratory experiments.
2. Perform quantitative chemical measurements using appropriate laboratory techniques, with careful attention to accuracy, precision, and significant figures.
3. Analyze experimental data, evaluate sources of systematic and random error, and relate experimental results to theoretical concepts.
4. Prepare structured laboratory reports using accepted scientific writing conventions and ethical data-reporting practices.
5. Develop safe laboratory habits and demonstrate responsible conduct in a chemical laboratory environment.

Course Outline and Tentative Schedule:

		Lab Report Due
Week 1 29 June	Introduction	-----
Week 1 30 June	Accuracy, Precision, and Significant Figures in Chemical Measurements	-----
Week 2 6 July	Identification of Substances by Their Reactions	13 July
Week 2 7 July	Thermochemistry	14 July
Week 3 20 July	Hess Law	27 July
Week 3 21 July	Reaction Kinetics	28 July
Week 4 27 July	Le Chatelier's Principle	3 August
Week 4 28 July	Standardization & Acid/Base Titrations	4 August
Week 5 3 August	Redox Reactions	10 August
Week 5 4 August	Electrochemistry	11 August
Week 6 10 August	Makeup Experiments	14 August

This tentative schedule is subject to adjustment due to national holidays or unforeseen circumstances.

Grading Policy:

- Lab Reports: 40%
- Midterm Exam: 20% (Date to be announced)
- Final Exam: 40% (Date to be announced)

Attendance Policy:

Mandatory Attendance: Attendance at **laboratory lectures and experiments is mandatory**. Students must attend the laboratory lecture to be eligible to submit a lab report. In addition, **at least 80% of the laboratory experiments must be completed** in order to be eligible to take the final exam.

Excused Absences: Absences will be considered excused **only in cases of documented illness or official university duties** (e.g., a signed report from the University infirmary or an authorized health institution, or an official letter). **A make-up session will be scheduled during the last**

week of the semester and will be **limited to one experiment only**, regardless of the number of excused absences.

Unexcused Absences: No make-up sessions will be provided for unexcused absences.

Final Exam Eligibility: Failure to meet the attendance requirements will result in ineligibility for the final exam.

Additional Attendance Policy: The course consists of eight laboratory experiments. Each student is allowed **one unexcused absence** and **one excused absence** (supported by official documentation and subject to instructor approval) during the semester. Students who miss **two or more laboratory experiments**, exceed the allowed absence limits, or fail to submit **two or more laboratory reports** by the specified deadlines will **not be eligible to take the laboratory final examination**. Such students will also be **removed from the laboratory roster and will not be permitted to attend the remaining laboratory lectures or experiments**.

Examinations:

Excused Absences for Midterm Exam: Students may be excused from a midterm exam **only** in cases of **documented illness or official university duties**. **Official documentation** (e.g., an infirmity report or an official letter) **must be submitted within one week of the exam date** to be considered for an excused absence.

A make-up midterm exam will be administered during the last week of the semester.

Final Exam: The **final exam is mandatory** in order to pass the course. **Meeting attendance requirements and completing all required coursework** are prerequisites for eligibility to sit the final exam. Any excuse for missing the final exam **must be reported directly to the Registrar's Office**, in accordance with university regulations. In addition, **at least 80% of the laboratory experiments must be completed** in order to be eligible to take the final exam.

Laboratory Reports and Academic Integrity:

- Students **must attend both the laboratory lecture and the corresponding experiment** in order to submit a lab report. **If either the lecture or the experiment is missed, submission of the lab report is not permitted.**
- **Lab reports must be prepared and submitted individually.** Group submissions, copied content, or any form of academic dishonesty will not be accepted.
- **No handwritten reports will be graded.** All lab reports must be prepared using Word. However, formulas, equations, reaction schemes, or drawings that are difficult to prepare digitally may be handwritten neatly and inserted into the report as clear images (e.g., photographed or scanned and added using the *Insert* function in Word).
- **Email submissions of lab reports are not allowed.** All reports must be submitted only through the official Turnitin/Moodle system. Reports sent by email will not be considered or graded.

- **Lab reports are due by 23:59, one week after the completion of each experiment, unless stated otherwise, and must be submitted electronically via Turnitin/Moodle.**
- **Strict adherence to deadlines is required.**
- **No late lab reports will be accepted under any circumstances.** Students are strongly encouraged to **plan ahead and submit reports early** to avoid technical or last-minute issues.

Safety and Conduct:

Students are required to **strictly follow all laboratory safety rules and instructions** provided by the instructor and teaching assistants. **Failure to comply with safety regulations or laboratory conduct rules may result in immediate removal from the laboratory** and may lead to further **disciplinary action** in accordance with University policies.

*This syllabus is subject to change. Any updates or modifications will be **announced via Moodle**, and students are responsible for staying informed of such changes.*