

2026 Spring Semester

Syllabus for General Chemistry I

“Chemistry Around Us”

1. **Course:** **General Chemistry I-D (CH.10001)** [lecture: Experiment: Credit = 3:0:3]

2. Lecture Timetable

Time (Tuesdays and Thursdays)	Class	Professor	Lecture Room(E11)
9:00-10:30	D	-	E11-410

3. Summary of Lecture

- o The lecture highlights how chemistry is linked to everyday life, environmental concerns, and important societal issues.
- o The lecture covers basic principles of chemistry in a way that shows their practical importance in the real world.
- o This lecture will focus on applying chemistry concepts to real-world scenarios. It starts with discussing the chemistry behind portable electronics and linking it to the periodic table. The lecture then explores topics such as air quality, solar radiation, climate change, and water resources, emphasizing their chemical aspects. It will also cover energy topics like combustion and alternative energy sources, as well as materials science, including plastics. Additionally, it will touch on the chemistry of food, health, and genetics. This approach makes chemistry relevant and understandable for non-science majors.

4. Materials for Teaching:

- All lecture notes can be downloaded from KLMS (<https://klms.kaist.ac.kr/>).
- Chemistry in Context, 10th ed, McGraw-Hill
- **CH101-B Board** (This will be open near the end of February, and the link will be posted): Details on homework and the lecture schedule.

5. General Guidelines

- 1) **Grading System:** Final grades are determined by total score. The proportion of A grades (A+, A0, A-) will be capped below 50%.
 - A score of approximately 50 points corresponds to a C-.
 - For P/NR grading, students must score above 50 points to receive a P.
- 2) **Oral Presentation (Edu4.0Q):** In May, all students will give a short presentation on contemporary topics in chemistry. Students will evaluate other students' presentations. This activity is important and required to attend. Details on group assignments and topics will be provided in class.
- 3) **In-Class Questions (Edu4.0Q):** Students are encouraged to ask and submit questions. Questions should be thoughtful, relevant to the lecture content, and demonstrate independent inquiry. Outstanding questions that spark discussion or show deep insight may receive bonus points. For the bonus points, students are required to (1) ask questions in the class, then (2) submit the questions on the KLMS board, along with brief answers reflecting their own understanding and research.
- 4) **Mid-term & Final Exams:** Exams will cover material presented in class.
- 5) **Grading Criteria and Points Distribution**

(The details will be announced & presented on the first day.)

I. Attendance: 15 pts

- Attendance (designated seating): attendance +1 pt, maximum 15 points
No excuse (including any hospital visit, official trip, menstrual leave, etc) is accepted. No partial point for lateness. (You can use the allowed absence days (about 10 classes). Do not send any email regarding this.)

II. Oral Presentation: 25 points

III. Mid-term Exam: 30 points

IV. Final Exam: 30 points

V. Questions (extra points): (up to 10 points)

VI. Plagiarism and misconduct: F grade

* Note: Requests to change final grades based on personal circumstances are prohibited under the Korean Anti-Corruption Act. Grade discussions are only permitted in cases of clear evaluation error, not for subjective reconsideration.

6. Lecture Schedule (TBA)

The detailed weekly schedule will be shared via a document linked in KLMS. Topics include:

1. Week 1&3: Electrons, Bonds, and Molecular Properties
2. Week 3&4: Chapter 2. Air
3. Week 4&5: Chapter 3-4. Radiation, Climate Change & CO₂ Problem
4. Week 5,6&7: Chapter 5-6. Water, Energy, Thermodynamics
5. Week 8: Mid-term Exam
6. Week 9: Chapter 7-8. Energy Storage
7. Week 10: Chapter 9. Polymers and Plastics
8. Week 11&13: Student Presentation (Edu4.0Q)
9. Week 14&15: (Chap 7~9) Chemistry for Sustainable Future
10. Week 16: Final Exam

7. Presentation & Exams in Detail

Detailed instructions and schedules for presentations and exams will be provided in the class-shared document (link via KLMS).

Please attend the first day of class for an overview and orientation.