2025 Fall Semester

Syllabus for General Chemistry I-Chemistry Around Us

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

2. **Lecture Timetable**

Time (Tuesdays and Thursdays)	Class	Professor	Lecture Room(E11)
10:30~12:00 or 14:30~16:00	TBA	TBA	TBA

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 emphasizes the application of fundamental chemistry concepts to real-world scenarios. It may begin by examining the chemical principles underlying portable electronic devices, using this as an entry point to introduce the periodic table. The course will then explore a range of topics—including air quality, solar radiation, climate change, and water resources—highlighting the chemical foundations of each issue. Discussions will also encompass energy-related subjects such as combustion and renewable energy technologies, as well as materials science topics like polymers and plastics. Furthermore, the lecture may address the chemical aspects of food, health, and genetics. Through this thematic approach, the course aims to demonstrate the relevance of chemistry in everyday life, making it accessible and meaningful to students without a science background.

4. Material for Teaching:

o Chemistry in Context, 10th ed, McGraw-Hill

o Lecture materials will be provided through the KLMS website of each class (https://klms.kaist.ac.kr/).

5. General Guidelines

All basic lecture notes can be downloaded at the General Chemistry Website: http://www.gencheminkaist.pe.kr or a link be found at http://chem.kaist.ac.kr.

1) The grading system will be determined based on the total scores achieved by students. The distribution of A grades (including A+, Ao, and A-) will be less than 50% of the total class. A C- grade will correspond to a total score of approximately 50 points. Students taking the course with a P/NR grading option must achieve a score higher than 50 points (equivalent to a C-).
2) **Oral Presentation**: During the week of the 13th and 14th, all students are required to deliver a brief oral presentation on contemporary issues in chemistry.
3) **Final Exam**: The final exam will require you to express your ideas on the topics covered in this lecture.
4) **Grading Criteria and Points Distribution** (details will be announced to each class)

   I. Attendance: 15 points
   - Maximum of 15 points (1 point for each attendance of lectures)
   - This course does not penalize absences, so there is no recognized attendance.

   II. Participation/Assignments: 25 points

   II. Oral Presentation: 30 points

   III. Final Exam: 30 points

   IV. Plagiarism of any submitted materials: F grade

6. Waiver Examination

The waiver examination for General Chemistry I will be held at the beginning of the semester and is exclusively available to students who have not previously taken any General Chemistry I courses. The exam will assess general topics covered in General Chemistry.

7. Lecture Schedule (TBA)

Week (Tuedays, Thursdays)	Chapters	Topics	Due date for Homework	Notes
1st (9/2, 9/4)	1	Portable electronics		
2nd (9/9, 9/11)	2	Air		
3rd (9/16, 9/18)	3-4	Radiation-Climate Change		
4th (9/23, 9/25)	4-5	Climate Change – Water		
5th (9/30, 10/2)	6	Combustion		
6th (10/7, 10/9)				Chuseok and Hangul Proclamation Day
7th (10/14, 10/16)	7-8	Alternative Energy-Energy Storage		
8th (10/21, 10/23)		No mid-term exam		Exam week
9th (10/28, 10/30)	8-9	Energy Storage-Polymers	-	
10th (11/4, 11/6)	10-11	Brewing and Chewing-Nutrition	-	
11th (11/11, 11/13)	11-12	Nutrition-Health		
12th (11/18, 11/20)	12-13	Health-Genes		
13th (11/25, 11/27)	Presentation A			
14th (12/2, 12/4)	Presentation B			
15th (12/9, 12/11)	No Class			
16th (12/16)	Final Exam	Chapters 1-12		

8. Chapter Assignments

Submit the assignment by the Friday of the week following the completion of each chapter. The document must adhere to the format provided below and be limited to a total of three pages.

Evaluation: ABC

Evaluation Criteria:
Presentation of significant issues (i.e., an assessment of the importance of the question)
Appropriate data collection
In-depth expression of opinions