



CH107: College Chemistry

🕒 Class Time

MTWTh 09:00 ~ 13:00

📍 Location

To be announced

🎓 Credit

3

👤 Instructor

Professor David G. Churchill (dchurchill(at)kaist.ac.kr)

Education: BS, University at Buffalo

PhD, Columbia University

Postdoc, University of California, Berkeley

📖 Required Materials

Textbook: L.J. Malone and T.O. Dolter, Basic Chemistry. J Wiley and Sons Inc. 9th Edition (International Student Version), 2012

📄 Course Summary

College Chemistry is a basic subject for freshmen, enabling students to achieve an important and smooth transition to General Chemistry I (CH101) especially when they did not have a science focus in High School. A textbook, mainly based on fundamental ideas of chemistry, will be used to cover most of the basic concepts required for General Chemistry at KAIST. The syllabus for Summer 2018 covers Chapters 2-14. Additionally, a 'Special Topics' section relating to quantum theory and wave mechanics will be given at the end of the course. Students lacking an excellent mathematical background should read Appendixes A and B. Quizzes will be of the multiple-choice type.

※ Weekly Schedule (tentative)

Class (week beginning)	Content (Subject)
Week 1 (2018/7/9-12)	Ch. 2: Elements and Compounds. Ch. 3: Properties of Matter and Energy.
	Ch. 4: The Periodic Table and Chemical Nomenclature.
	Ch. 5: Quantities in Chemistry. Ch. 6: Chemical Reactions. Quiz 1 (Prologue/Ch. 1).
Week 2 (2018/7/16-19)	Ch. 7: Quantitative Relationships in Chemical Reactions. Ch. 8: Modern Atomic Theory. Quiz 2 (Ch. 2-4).

	Ch. 8: Review of Chapters 2-8. Quiz 3 (Ch. 5-7).
	Ch. 9: The Chemical Bond. Ch. 10: The Gaseous State.
Week 3 (2018/7/23-26)	Ch.11 The Solid and Liquid States. Ch. 12: Aqueous Solutions. Quiz 4 (Ch. 8-10).
	Ch. 13: Acids, Bases and Salts. Ch. 14: Oxidation-Reduction Reactions (Part A only). Quiz 5 (Ch. 11-13).
	Ch.14A 'Special Topics'
	'Special Topics'/ Review of Chapters 9-14A*. Quiz 6 (Ch. 14 (Part A))

Course Evaluation

Final Exam : 60

Quizzes(6) : 40 total

Total: 100

The final exam (TBA) covers Ch. 2-14 (Part A), and the Special Topics section. It will consist of short conventional questions. Further details will be posted on the accompanying website in due course.