

<<Last Updated:2022/02/01>>

Course Schedule Information

Course Code	13A718
Semester	Fall Term
Day and Period	Mon1
Course Name (Japanese)	Introductory Chemistry BI
Room	IRB 401 Lecture Room
Course Name	Introductory Chemistry BI
Capacity	0
Course Numbering Code	G3IUPS1G001
Credits	1.0
Student Year	1,2,3,4,5,6
Instructor	Luke Dylan Ueda-Sarson
Course of Media Class	Not Applicable

※About Course of Media Class

"Course of Media Class" are classes in which more than half of the classes are held in places other than classrooms by making advanced use of various media.

Undergraduate students can include up to 60 credits in media class course as requirements for graduation.

Even if this is not the case, we may hold classes using the media.

Basic Syllabus Information

Subtitle	
Eligibility	

Detailed Syllabus Information

Course Name	Introductory Chemistry BI
Language of the Course	English
Type of Class	Lecture Subject
Course Objective	To give 1st-year science students a solid foundational understanding on how energy interacts with matter: the science of thermodynamics.
Learning Goals	Detailed learning goals will be provided at the start of each lesson. Overall course learning goals are based on exploring the laws of thermodynamics. The overall goal is to be able to express how matter behaves in accordance with the laws of thermodynamics.
Requirement / Prerequisite	Introductory Chemistry AI (or equivalent)
Class Plan	Week 1: Introduction to thermodynamics: systems, state quantities, ideal/perfect gases Week 2: Ideal Gas behaviour; Boltzmann distribution; the 0th Law of Thermodynamics Week 3: The 1st Law of Thermodynamics; heat, work, internal energy, heat capacity, enthalpy Week 4: The 2nd & 3rd Laws of Thermodynamics; entropy Week 5: Gibbs Energy Week 6: Thermochemistry Week 7: States of matter Week 8: Exam
Independent Study Outside of Class	Students will need to work on exercise problems given during class, as well as review the contents of each lesson and prepare for upcoming lessons.
Textbooks	No one textbook is followed. Topics will mainly be drawn from the 3 reference text books described below.

Reference	Nivaldo J. Tro: Chemistry, A Molecular Approach (3rd, 4th , or 5th editions); Atkins & de Paula: Physical Chemistry (9th, 10th or 11th editions); McQuarrie & Simon: Physical Chemistry: A Molecular Approach
Grading Policy	Participation: 5% Exercises: 6 x 5% = 30% Final exam: 65%
Other Remarks	"Participation" covers things like how well you contribute to class discussions.
Special Note	Some copies of the textbooks are available for loan from the International College. Others can be found in the main library.
Office Hour	I can be contacted, in principal, at any time without special reservations. My office is room 510 of the IRB building, next door to the International College Office.
Messages to Prospective Students	This course is designed to roughly correspond to the equivalent Japanese language-taught Introductory Chemistry BI courses that were offered by the School of Science (the Japanese BI and BII course have now been amalgamated, while the IUPS courses are still separate).

Instructor(s)

Instructor Name	Name (hiragana)	Affiliation, Title, Course	Office	Extension	E-mail
No data found					

Cautions for Students