シラバス参照

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

Course Schedule Information

Course Code	13A719
Semester	Winter Term
Day and Period	Mon1
Course Name (Japanese)	Introductory Chemistry BII
Room	IRB 401 Lecture Room
Course Name	Introductory Chemistry BII
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 BII
Language of the Course	English
Type of Class	Lecture Subject
Course Objective	To further expand the foundations of chemistry for physical science major students by studying how matter interacts with energy: the field of physical chemistry.
Learning Goals	Detailed learning goals will be provided at the start of each class. Overall course learning goals are based on moving beyond the thermodynamics of a system into topics such as equilibrium and kinetics. The overall goal is to be able to express how matter acts in response to changes in energy.
Requirement / Prerequisite	Introductory Chemistry BI (or equivalent)
Class Plan	Week 1: Multi-component systems; chemical potential; Clausius-Clapeyron equation Week 2: Mixtures: gaseous and liquid solutions; activities Week 3: Colligative properties; van't Hoff factor; non-solutions Week 4: Chemical equilibrium 1 - the equilibrium constant Week 5: Chemical equilibrium 2 - ionic dissociation, acidity, redox reactions Week 6: Reaction rates 1 - reaction order; reaction rate constants Week 7: Reaction rates 2 - activation energy, molecularity, catalysis Week 8: Exam
Independent Study Outside of Class	Preparation for upcoming lessons: read the appropriate sections(s) of the textbooks(s). Homework exercises: 7 (for lessons 1 through 7). Review the contents of each class.
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: 7 x 5% = 35% Finale exam: 60%
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 BII 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