

Introduction to Chemistry

Course Title	Introduction to Chemistry		
Course Code	CHE101B	Course Type	Free Elective
Credit	4	Contact Hours	60
Prerequisites	None	Co-Requisites	None
Duration	15 weeks	Class Type	Lecture

SolBridge GACCS Objectives	%	Learning Objectives
1. Global Perspective	0	1. Knowledge of basic principles of chemistry 2. Understand the application of chemistry and chemical business
2. Asian Expertise	0	
3. Creative Management Mind	0	
4. Cross Cultural Communication	0	
5. Social Responsibility	0	

Course Description

This course is intended to teach the students basic principles of chemistry in one semester. Selected topics from wide-range of general chemistry areas will be covered. Special lectures on the application of chemistry and chemical business will be provided. The course is offered for the students preparing for and seriously considering to apply to SolBridge's 2+2 Transfer Program with Georgia Institute of Technology.

Learning and Teaching Structure

The laboratory space is provided with generous helps from School of Food Science & Biotechnology, Woosong University. Besides experimental projects done on campus, 2 or 3 field trips to a research and development laboratory of a prominent energy company and national laboratories in Daedeok Science Valley will be arranged for hands-on experiences on modern instrumental analysis techniques. Also there will be several assignments requiring essay preparation after watching videos or reading papers. Besides experimental projects done on campus, 2 or 3 field trips to a research and development laboratory of a prominent energy company and national laboratories in Daedeok Science Valley will be arranged for hands-on experience on modern instrumental analysis techniques.

Assessment	%	Text and Materials
Class Participation/ Attendance	20	Title: Chemistry for Changing Times Edition: 13th Edition (Published in 2014) Authors: John Hill, et al. Publisher: Pearson ISBN-13: 978-1-292-02121-8
Midterm Examination	20	
Final Examination	40	
Practical Achievement	20	

Course content by Week

1	Introduction
2	Chemical Foundations
3	Atoms, Molecules, and Ions
4	Special Session
5	Stoichiometry
6	Types of Chemical Reactions and Solution Stoichiometry
7-8	MIDTERM EXAMINATION
9	Gases
10	Thermochemistry
11	Properties of Solutions
12	Organic Molecules
13	Special Sessions on Chemical Industry
14-15	Review and Final Examination

