



## Undergraduate Course Syllabus

### SCI 213: Principles of Physical Science II

Center: Online

#### Course Prerequisites

None

#### Course Description

This course focuses on the atomic and molecular aspects of the physical sciences. Topics include the atomic and molecular structure of matter, the nature of electricity and magnetism, basic thermodynamics, chemical reactions, and basic organic chemistry.

#### Course Outcomes

- Chemistry basics and the atmosphere
- Periodic table and the ozone layer
- Molecules and global warming
- Energy and society
- Water, acids and bases, and acid rain
- Radioactivity and fuel cells
- Plastics, polymers and synthetic drugs
- Nutrition and genetic engineering

#### Required Materials

Chemistry in Context: Applying Chemistry to Society with Connect Plus Access Card

American Chemical Society

McGraw-Hill

7th

2011

9780077468460

#### Connect

Throughout the course, there are assignments in Connect. Your instructor will provide you with the Course ID to enroll in Connect. Refer to the Connect folder in the Course Information section of your course for additional information.

### Instructor Availability and Response Time

Your class interaction with your instructor and your classmates will take place in Blackboard on a regular, ongoing basis. Your instructor will be active in Blackboard at least five days a week, and you will normally communicate with your instructor in the open Blackboard discussion forum so that your questions and the instructor's answers benefit the entire class. You should send emails directly to your instructor only when you need to discuss something of a personal or sensitive nature, and in those cases your instructor will generally provide a response within 24 hours.

### Grade Distribution

Assignment Category	Number of Graded Items	Point Value per Item	Total Points
Discussion	8	25	200
Online Lab	4	100	400
Paper	2	100	200
Midterm Exam	1	100	100
Final Exam	1	100	100
		<b>Total Course Points:</b>	1,000

This course may also contain practice activities. The purpose of these non-graded activities is to assist you in mastering the learning outcomes in the graded activity items listed above.

### University Grading System: Undergraduate

<i>Total Points: 1,000</i>				
<u>Grade</u>	<u>Numerical Equivalent</u>	<u>Points</u>	<u>Points Equivalent</u>	
			<i>Lower</i>	<i>Upper</i>
A	93-100	4	930	1,000
A-	90-92	3.67	900	929
B+	87-89	3.33	870	899
B	83-86	3	830	869
B-	80-82	2.67	800	829
C+	77-79	2.33	770	799
C	73-76	2	730	769
C-	70-72	1.67	700	729
D+	67-69	1.33	670	699
D	60-66	1	600	669
F	0-59	0	0	599
I	Incomplete			
IF	Incomplete/Failure*			
IP	In Progress (past end of term)			
W	Withdrawn			

\*Incomplete and Incomplete/Failure: Any student requesting an "I" grade must complete a Student Petition & Contract for a Grade of Incomplete and submit it to the proper offices prior to the final day of the term/semester. The petition will specify a deadline by which the coursework must be completed. The incomplete automatically becomes an "IF" if work has not been completed and a grade has not been submitted by the specific deadline.

### Grading Guides

Specific activity directions and grading guides can be found in the Course Information area in the Assignment Guidelines and Rubrics folder.

### Weekly Assignment Schedule

The Learning Modules area in Blackboard contains one module folder for each week of the course. All reading and assignment information can be found in the folders. All assignments are due by 11:59 p.m. EST on the last day of the module week.

In addition to the textbook readings that are listed, there may be additional required resources within each module in Blackboard.

Module	Topics and Assignments
1	Icebreaker Activity (Required) Basic Chemistry Concepts Reading: <i>Chemistry in Context</i> , Chapter 1 1-1 Discussion: Air Pollution 1-2 Online Lab: Laboratory One
2	Atoms and the Ozone Layer Reading: <i>Chemistry in Context</i> , Chapter 2 2-1 Discussion: Threats to the Ozone Layer 2-2 Doing: The Structure of the Atom 2-3 Paper: Ozone Paper
3	Molecular Shapes, the Greenhouse Effect, and Global Warming Reading: <i>Chemistry in Context</i> , Chapter 3 3-1 Discussion: The Greenhouse Effect, Global Warming, and Air Pollution 3-2 Doing: The Chemistry of Carbon 3-3 Online Lab: Laboratory Three
4	Chemical Energy, Fuels, and Pollution Reading: <i>Chemistry in Context</i> , Chapter 4 4-1 Discussion: Alternate Forms of Fuel 4-2 Midterm Exam: Midterm Exam

5	Water, Acids, and Bases Reading: <i>Chemistry in Context</i> , Chapters 5 and 6 5-1 Discussion: Water Pollution 5-2 Doing: The Physical Characteristics of Molecules and Ions 5-3 Online Lab: Laboratory Five
6	Nuclear Energy, Radioactivity, and Electrical Energy Reading: <i>Chemistry in Context</i> , Chapters 7 and 8 6-1 Discussion: Nuclear Energy and Waste 6-2 Doing: Characteristics of Nuclear Energy 6-3 Paper: Paper Two
7	Plastics and Organic Chemistry Reading: <i>Chemistry in Context</i> , Chapters 9 and 10 7-1 Discussion: Plastics and the Environment 7-2 Doing: The Shapes of Molecules and the Value of Recycling 7-3 Online Lab: Laboratory Seven
8	Nutrients, DNA, and the Genetic Code Reading: <i>Chemistry in Context</i> , Chapters 11 and 12 8-1 Discussion: Genetic Engineering 8-2 Final Exam: Final Exam

### Attendance Policy

Failure to participate during the first week of the course (12:00 a.m. Monday through 11:59 p.m. Sunday) will result in automatic withdrawal. Participation is defined as posting within a discussion board, wiki, or blog, and/or submitting an assignment. Students who do not participate during the first week forfeit their rights to be reinstated into the course.

Extended absences, defined as failure to post into the Blackboard classroom for more than five days, must be coordinated with the instructor. Students who fail to coordinate any such absence with the instructor, or who fail to withdraw from the course in accordance with the COCE official drop and withdrawal policy, will be graded appropriately.

All assignments must be submitted through the appropriate Blackboard tool by 11:59 PM Eastern Standard Time on the specified due date. Refer to the Assignment Guidelines and Rubrics folder for specific details on completing the assignments in this course.

### SNHU College of Online and Continuing Education Withdrawal Policy

[https://my.snhu.edu/\\_layouts/FormServer.aspx?XsnLocation=https://my.snhu.edu/FormServerTemplates/COCE.Withdrawal.revised.form.xsn&SaveLocation=https%3A%2F%2Fmy%2Esnhu%2Eedu%2FOffices%2FCOCE%2FAdvising%2FCourse%20Withdrawal%20Library&OpenIn=browser](https://my.snhu.edu/_layouts/FormServer.aspx?XsnLocation=https://my.snhu.edu/FormServerTemplates/COCE.Withdrawal.revised.form.xsn&SaveLocation=https%3A%2F%2Fmy%2Esnhu%2Eedu%2FOffices%2FCOCE%2FAdvising%2FCourse%20Withdrawal%20Library&OpenIn=browser)

## SNHU College of Online and Continuing Education Guide to Student Success

<https://my.snhu.edu/Resources/StudentHandbooks/Pages/default.aspx>

### Blackboard Course Tools/Areas Overview

Your course will be delivered through Blackboard. Below are the most often used Blackboard tools and areas.

Tool/Area	Description	You Should...
Announcements	This area is used to post day-to-day course details such as the status of or directions for assignments.	Check the announcements on a regular basis, at least several times each week.
Course Information	The course syllabus, assignment guidelines and rubrics, technical support, Student Handbook, and advising information can be found here.	Check this area at the start of the class. It is recommended that the syllabus be downloaded for future reference.
Learning Modules	This area contains course content, including lectures, readings, resources, and assignments.	Check this area at the start of each module and throughout the module week to review course materials.
Discussion Board	This is one of the areas for discussion and collaboration in the class.	Participate and contribute on a regular basis if your course includes discussions.
Research/Writing	SNHU library and research information can be found here.	Check this area for links and information on different library-related resources.
My Instructor	Instructor information is located in this area.	Check this area to find out about your instructor's background and contact information.
My Grades	Assignment grades are located in this area.	Check this area to find out your grades for your course assignments.

### Southern New Hampshire University Policies

More information about SNHU policies can be found at

<https://my.snhu.edu/Academics/Pages/SyllabiStatements.aspx>.

**Continuing Education Center Instructor Availability:** All undergraduate Continuing Education instructors at all center locations (Manchester, Nashua, Salem, Portsmouth, and Brunswick, Maine) will be available to students for a minimum of four additional hours of face-to-face meeting time per term. This time is in addition to the required 20 hours of face-to-face time in hybrid classes and the required 40 hours of face-to-face time in lecture classes. How the additional meeting time is utilized is at the discretion of the instructor and may vary by course.

**Academic Honesty Policy:** Southern New Hampshire University requires all students to adhere to high standards of integrity in their academic work. Activities such as plagiarism and cheating are not condoned by the university. Students involved in such activities are subject to serious disciplinary action. Plagiarism is defined as the use, whether by paraphrase or direct quotation, of the published or unpublished work of another without full and clear acknowledgment. Cheating includes the giving or receiving of unauthorized assistance on quizzes,

examinations, or written assignments from any source not approved by the instructor. Understand that in taking this course, your assignments may be submitted to Turnitin.com or other plagiarism-detection services and reviewed for textual similarity suggestive of plagiarism. All submitted papers are subsequently included as source material in the Turnitin.com database for the purpose of detecting plagiarism in other submitted work. Please review the Turnitin.com Usage Policy should you have any questions. For more about academic dishonesty, please refer to the undergraduate or graduate catalogs.

**ADA/504 Compliance Statement:** Southern New Hampshire University is committed to and concerned with meeting the needs of students challenged by physical, sensory, psychiatric and/or learning disabilities with regard to the Americans with Disabilities Act (ADA), as amended, and Section 504 of the 1973 Rehabilitation Act. At the beginning of each term, or as soon as you become aware of a disability, we encourage you to contact the Office of Disability Services to discuss accommodations for which you may be qualified.

For questions concerning support services, documentation guidelines, or general disability issues:

Office of Disability Services, Exeter Hall, Suite 59  
Hyla Jaffe, Director  
603.626.9100 ext. 2386  
[h.jaffe@snhu.edu](mailto:h.jaffe@snhu.edu)

For questions concerning disability-related compliance matters, grievance, or legal issues:

Ms. Jet Goldberg, ADA/504 Compliance Officer  
Director of Wellness Center  
603-645-9679  
[j.goldberg@snhu.edu](mailto:j.goldberg@snhu.edu)

**Technical Support:** Support for Blackboard or other technology issues via phone, chat, and online form submission is available from the SNHU Technology Help Desk at <http://www.snhu.edu/techsupport> including 1.855.877.9919. Technical support is available 24/7.

**Academic Assistance:** Online students enrolled in undergraduate courses in the areas of math, writing, accounting, and statistics will have access to Smarthinking online tutoring:  
<https://my.snhu.edu/offices/COCE/Tutoring/Pages/default.aspx>.

**Library Resources Statement:** In addition to the intellectual resources available onsite and online, <https://my.snhu.edu/Academics/Library/Pages/default.aspx>, Shapiro Library makes available group and one-on-one instruction in information literacy, enabling students to define and articulate what knowledge-based resources are relevant to their research interests. Library staff are available to assist students in effectively and efficiently accessing information from credible sources, to compare new knowledge with prior beliefs, and to consider the related ethical, legal, and socioeconomic issues that are inherent in scholarly investigation.

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