



**HOUSTON COMMUNITY COLLEGE SYSTEM  
SPRING BRANCH  
PHYSICAL SCIENCE DEPARTMENT**

**GENERAL CHEMISTRY I (1411)**

**Class schedule: Fall 2012, CRN 23633**

**Tuesday: 5:30-9:30 PM Room 522 (Lab)**

**Thursday: 5:30-9:30 PM Room 517 (Lecture)**

This course fulfills the following core intellectual competencies: <sup>1</sup>Reading (Textbook and Laboratory Protocols); <sup>2</sup>Writing (Laboratory Reports); <sup>3</sup>Speaking (Laboratory Work Groups); <sup>4</sup>Listening (Lecture); <sup>5</sup>Critical thinking (Lab Data Analysis and lecture tests); <sup>6</sup>Computer literacy (computer assisted and computer simulated labs).

(1) Dr. Mohammad S. Ali

Telephone: 713-745-4666

Email: mohammad.ali@mdanderson.org

(2) The HCC-Northwest Learning College Site is at <http://learning.nwc.hccs.edu/>

- Select Courses using the top tab.
- Then select chemistry.
- Then Select either CHEM 1411.
- Sample tests for this course will be under CHEM 1411.
- Sample Final Exam is under CHEM 1411.

**(1) Text Books:**

- **Chem 1411, General Chemistry I. MacGraw-Hill.**
- **You may elect to use the previous text as a reference.**
- **Catalyst, Lab Manual for CHEM 1411 and CHEM 1412.**

**(2) Course Grading System:**

**The overall score is based on the following:**

<b>Three regular exams</b>	<b>55%</b>
<b>Laboratory</b>	<b>20%</b>
<b>Final</b>	<b>25%</b>

**The course grade**

<b>90 - 100</b>	<b>A</b>
<b>80 - 89</b>	<b>B</b>
<b>70 - 79</b>	<b>C</b>
<b>60 - 69</b>	<b>D</b>

< 60 F

**(A) Lab.**

- 90% of the lab grade will come from graded lab reports.
  - Each lab report will worth a specified number of points. Lab reports should be completed individually.
  - Pre-lab tests may be given prior to the start of the lab. These tests will be short and worth only one-two points. The pre-lab test points will be included in the lab report grade. You must be present to take the pre-lab test.

**(B) Lecture**

**(C) No lecture points.**

Quiz will be conducted at the end of each chapter.

25 % of the quiz average will be added to the lowest of the three exam grades.

3 tests:	300 total points	A (90-100%) =450-500 total points
Final exam:	100 total points	B (80-89%) =400-449 total points
Lab Grade:	100 points	C (70-79%) =350-399 total points
Max course points =	500 total	D (60-69%) =300-349 total points
		F (0-59%) =000-299 total points

**(D) The final exam is a HCCS system final exam and is required. The final exam grade will not be dropped.**

**(3) Honesty:**

- Please be aware that the HCC rules regarding cheating will be enforced. Anyone caught cheating either will receive a grade of zero or be dropped from the course.

**(4) Makeup Tests/Labs:**

- Makeup tests will NOT be scheduled. In case of emergency or on Medical grounds it will be conducted within a week for test 1 or 2.
- Due to the large number of wet labs, makeup labs might not be possible. Don't miss a lab.

**(5) ADA Requirements:**

- The Houston Community College System obeys all ADA requirements.
- If you need assistance, either contact me or Dr. Nancy Russell at 713-718-5708. Dr. Russell is the director of the ADA center at HCC-NW.

**(6) Exams Schedule**

Late Submission of Labs.	One time	10 Points Less
Test 1            October	17	Chapters 1-3    Time 2:30 hours
Test 2            November	15	Chapters 4-6    Time 2:30 hours
Instruction ends December	09	Chapters 7-10    Time 2:30 hours
Test 3            December	11	
Final Exam      December	13	Comprehensive    Time 2:30 hours

**(7) Class and Lab Schedule**

<b>Sept. 25 Tu.</b>	<b>Course Introduction Lab Safety Video Chapter 1. The Study of Changes</b>
<b>27 Th.</b>	<b>Chapter 1. The Study of Changes (Contd) Chapter 2. Atoms, Molecules, and Ions</b>
<b>Oct. 02 Tu.</b>	<b>Quiz on Chapter 1. Chapter 2, Atoms, Molecules, and Ions (Contd.) Experiment 1: Basic Laboratory Techniques</b>
<b>04 Th.</b>	<b>Quiz on Chapter 2. Chapter 3. Mass Relationship in Chemical Reactions</b>
<b>09 Tu.</b>	<b>Experiment 2: Separation of Components of a Mixture Chapter 3, Mass Relationship in Chemical Reactions (Contd.)</b>
<b>11 Th.</b>	<b>Quiz on Chapter 3. Chapter 4. Reactions in Aqueous Solutions</b>
<b>15 Tu.</b>	<b>Chapter 4. Reactions in Aqueous Solutions (Contd.) Experiment 3: Identification of Substances by Physical Properties</b>
<b>17 Th.</b>	<b>Test 1 (Chapters 1-3) Chapter 5. Gases</b>
<b>23 Tu.</b>	<b>Quiz on Chapter 4. Chapter 5, Gases (Contd.) Experiment 4: Formula and composition of Hydrates</b>
<b>25 Th.</b>	<b>Chapter 5. Gases (Contd.) Chapter. Thermochemistry</b>
<b>30 Tu.</b>	<b>Experiment 5: Reactions in Aqueous Solutions: Quiz on Chapter 5. Chapter 6. Thermochemistry (Contd.)</b>
<b>Nov. 01 Th.</b>	<b>Chapter 6. Thermochemistry (Contd.)</b>
<b>06 Tu.</b>	<b>Experiment 6: Activity Series Chapter 6. Thermochemistry (Contd.)</b>
<b>08 Th</b>	<b>Quiz on Chapter 6. Chapter 7. Quantum Theory &amp; Electronic Structures of Atoms</b>
<b>13 Tu.</b>	<b>Chapter 7. Quantum Theory &amp; Electronic Structures of Atoms (Contd.) Experiment 7: Behavior of Gases: Molar Mass of a Vapor</b>
<b>15 Th.</b>	<b>Test II (Chapters 4-6) Chapter 7. Quantum Theory &amp; Electronic Structures of Atoms (Contd.)</b>
<b>20 Tu.</b>	<b>Quiz on Chapter 7. Chapter 8. Periodic Relationships among the Elements Experiment 8: Heat of Neutralization</b>

- 27 Tu.** Chapter 8. Periodic Relationships among the Elements (Contd.)  
Chapter 9, Chemical Bonding 1. Basic Concepts
- 29 Th.** Quiz on Chapter 8.  
Chapter 9, Chemical Bonding 1. Basic Concepts (Contd.)
- Dec. 04 Tu.** Quiz on Chapter 9.  
Chapter 10. Chemical Bonding 2. Molecular Geometry & Hybridization of Atomic Orbitals
- 06 Th.** Quiz on Chapter 10  
Chapter 11. Inter Molecular Forces & Liquids & Solids  
Experiment 9: Molecular Geometry of the Molecules
- 11 Tu.** Test III (Chapters 7-10)
- 13 Th.** FINAL EXAM. REMEMBER THAT THIS WILL BE A SYSTEM FINAL EXAM.  
(COMPREHENSIVE, CHAPTERS 1-11).