CHM 191—General Chemistry I  
Fall 2011  
Course Syllabus

Instructor: Dr. Radha Narayanan  
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Class Times: 9:00-9:50 AM on Monday, Wednesday, and Friday in Pastore 234

Office Hours: Monday 10-11 AM, Wednesday 10-11 AM, also by appointment or email


Carbon-copy lab notebook needed for the laboratory component

Course Website: I have created a course website by using the URI Sakai system. The course website can be accessed by logging in directly to the URI Sakai portal website: https://sakai.uri.edu/portal/

Topics:

- Matter: Its Properties and Measurement
- Atoms and the Atomic Theory
- Chemical Compounds
- Chemical Reactions
- Introduction to Reactions in Aqueous Solutions
- Gases
- Thermochemistry
- Electrons in Atoms
- The Periodic Table and Some Atomic Properties
- Chemical Bonding I: Basic Concepts
- Chemical Bonding II: Additional Aspects
- Intermolecular Forces: Liquids and Solids
- Solutions and Their Physical Properties

Grading:

- Quizzes: 25%
- Exams: 2 (25% each)
- Laboratory: 25%
Lecture Schedule:

9/7/11—Matter: Its Properties and Measurement
9/9/11—Matter: Its Properties and Measurement
9/12/11—Atoms and the Atomic Theory
9/14/11—No Class
9/16/11—Atoms and the Atomic Theory
9/19/11—Chemical Compounds
9/21/11—Chemical Compounds
9/23/11—Chemical Reactions
9/26/11—Chemical Reactions
9/28/11—Introduction to Reactions in Aqueous Solution
9/30/11—Introduction to Reactions in Aqueous Solution
10/3/11—No Class
10/5/11—No Class
10/7/11—No Class
10/10/11—Columbus Day (No Class)
10/12/11—Gases
10/14/11—Gases
10/17/11—Thermochemistry
10/19/11—Thermochemistry
10/21/11—Review
10/24/11—Midterm Exam
10/26/11—Electrons in Atoms
10/28/11—Electrons in Atoms
10/31/11—The Periodic Table and Some Atomic Properties
11/2/11—The Periodic Table and Some Atomic Properties
11/4/11—Chemical Bonding I: Basic Concepts
11/7/11—Chemical Bonding I: Basic Concepts
11/9/11—Chemical Bonding II: Additional Aspects
11/11/11—Veteran’s Day (No Class)
11/14/11—Chemical Bonding II: Additional Aspects
11/16/11—Intermolecular Forces: Liquids and Solids
11/18/11—Intermolecular Forces: Liquids and Solids
11/21/11—Solutions and Their Physical Properties
11/23/11—Solutions and Their Physical Properties
11/25/11—Thanksgiving’s Holiday (No Class)
11/28/11—No Class
11/30/11—No Class
12/2/11—No Class
12/5/11—Review of Concepts
12/7/11—Review of Problems
12/9/11—Review of Problems
12/12/11—Review of Problems

Final Exam—December 14, 2011 from 8 AM to 11 AM
Recitation Schedule:
9/12/11—Quiz #1
9/19/11—Quiz #2
9/26/11—Quiz #3
10/3/11—No class
10/10/11—No Class (Columbus Day)
10/12/11—Quiz #4
10/17/11—Quiz #5
10/24/11—Quiz #6
10/31/11—Quiz #7
11/7/11—Quiz #8
11/14/11—Quiz #9
11/21/11—Quiz #10
11/28/11—Molecular Models Lab
12/5/11—Quiz #11
12/12/11—Quiz #12

Laboratory Schedule:

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<td>1</td>
<td>September 15, 16, 20</td>
<td>Scientific Measurements</td>
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<td>September 22, 23, 27</td>
<td>Separation of Food Dyes</td>
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<td>Sept. 29, 30, Oct. 4</td>
<td>Reaction of Household Chemicals</td>
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<td>4</td>
<td>Oct. 6, 7, 11</td>
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<td>5</td>
<td>Oct. 13, 14, 18</td>
<td>A Cycle of Copper Reactions</td>
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<td>Oct. 20, 21, 25</td>
<td>The pH Scale and Acid-Base Titrations</td>
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<td>Oct. 27, 28, Nov. 1</td>
<td>The Molar Volume of Dioxygen and Other Gases</td>
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<td>Nov. 3, 4, 8</td>
<td>The Heat Capacity of Metals</td>
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<td>Nov. 10, 15, 18</td>
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<td>Nov. 28 for all (2pm)</td>
<td>Molecular Models</td>
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<td>Final Exam</td>
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