CHM104 COURSE SYLLABUS
Oakland University College of Arts and Sciences
Winter 2006

I. Course Overview

A. Basic Information

Department: Chemistry
Course Prefixes: CHM104, Section 10225
Course Title: Introduction to Chemical Principles
Credit Hours: 4

Class meets MWF, 8:00 AM – 9:07 AM in Room 190 in HHS.

B. Instructors’ Information

Name: Ghassan M. Saed, Ph.D.
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Office Fax number: (248) 370-3221
Mailing Address: Chemistry Department
Oakland University, Rochester, MI 48309-4477

Office Hours: Before or after class or by appointment. Feel free to e-mail me at anytime.

C. Catalog Course Description

Study principles of general chemistry. Prepares students for CHM201. Recommended preparation: high school algebra and chemistry. Satisfies the university general education requirement in natural science and technology. Prerequisite: MTH011 with minimum grade of 2.0 or placement in MTH012 or higher MTH course; or CHM090.

D. Required Text

General Organic and Biological Chemistry, McMurry. Castellion
II. Course Goals and Objectives

CHM104 satisfies the university general education requirement in natural science and technology (NST). The learning outcomes for NST courses states that the student will demonstrate:

- knowledge of major concepts from natural science or technology, including developing and testing of hypotheses; drawing conclusions; and reporting of findings through some laboratory experience or an effective substitute (Laboratory experiences are met by either a limited number of interactive experiences, collecting and interpreting raw data, or other effective experiences such as a virtual laboratory)
- how to evaluate sources of information in science or technology

You will also be able to perform the following:
1. Balance various chemical equations.
2. Solve problems related to all Gas Law.
3. Solve problems related to molar ratios.
4. Determine the correct electron configuration of an atomic species.
5. Draw the Lewis electron-dot formula of a molecule.
6. Name various ionic and covalent compounds.
7. Identify the various types of the chemical reactions.

III. Course Policies and Procedures

A. Web site

Course Pack is now available. Please browse through it before coming to class. You are requested to check the announcement section on this site for homework assignments and other information related to this course.

B. Grading

There will be four multiple-choice exams (No comprehensive final exam will be given) and homework assignments. The due dates for these activities are shown in Time table.

The graded work will be:
Four multiple-choice exams 100 points each
Eleven homework assignments 2 points each

The maximum number of points that any student can accumulate is 422 points. Final numeric grades will be based on parameter H. A score of H or higher will be assigned a 4.0 grade. About half of the score will be assigned a 1.0 grade, with a linear grade scale in between. Students with total points less than about H/2 will receive a 0.0 grade. Personal grades are not available by e-mail but are available on the WebCT site.

C. Examinations

Examinations are based on material covered in class and in the textbook. All exams will consist of multiple-choice questions. Each of the four exams should take you no more than 60 minutes to complete.

No Make-up exams are given. Should you miss an exam for non-legitimate reasons, you will receive a grade of zero on the missed examination. If you missed an exam for a legitimate reason, we can negotiate.

Tentative plan for the exams:

**Exam 1** includes chapters 1, 2, and 3.
**Exam 2** includes chapters 4, 5, and 6
**Exam 3** includes chapters 7 and 8
**Exam 4** includes chapters 9, 10, and 11

D. Laboratory Experiences

There will be No laboratory experiences with this section.

E. Class Attendance

It is your choice not to come to class, but you are responsible for everything discussed in class, like changing exams dates and/or adding or omitting materials.
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<th>Chapters</th>
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<td>Chapter 1</td>
<td>Matter, Energy, and Life</td>
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<td>Jan 11, 13, 18</td>
<td>Chapter 2</td>
<td>Measurements in chemistry</td>
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<td>Jan 20, 23, 25, 27</td>
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<td>Atoms and the periodic table</td>
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<td>Feb 1, 3, 6</td>
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<td>Feb 8, 10, 13</td>
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<td>Feb 15, 17, 20, 22</td>
<td>Chapter 6</td>
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<td>Exam II Chapters 4-6</td>
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<td>Feb 25-Mar 5</td>
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<td>Winter recess (No classes)</td>
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<td>Mar 6, 8, 10</td>
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