Chemistry 101- General Descriptive
Chemistry I Section 002
Fall 2009

Course prerequisites: Math 110.
Course times and location: Tuesday, Thursday, 8-9:15am, Carroll Hall rm. 111

Course instructor: Brian P. Hogan, Ph.D.
Office: Morehead labs room 205
Email: hoganb@email.unc.edu
Office hours: Tuesday, Thursday 3pm-4pm.
Additional hours by appointment

Required text and materials:
• Chemistry the Central Science, 11th or 10th ed., Brown, LeMay and Bursten
• Student Solutions Manual to Accompany Chemistry the Central Science, 10th or 11th ed.
• Scientific calculator. Make sure your calculator can perform the following functions: +, -, /, *, log, ln, exp, e^x, square root, 1/x. Most importantly, make sure YOU KNOW HOW TO USE YOUR CALCULATOR.

Online course access: I will be using online resources extensively throughout this course. These interactions will take place via blackboard.unc.edu. I will communicate new announcements, answers to group questions, post grades confidentially (only you will have access to your individual grades), and send class emails from this site. IT IS IMPORTANT THAT YOU CHECK THIS SITE BEFORE EACH CLASS. This will ensure that you are up to date with any new information I have posted. Make sure you are registered for this class and that your email address is correct. If you are not receiving class emails you need to come see me immediately.

Skeleton notes: I have outlined each chapter for you and prepared what I call “skeleton notes”. Your job is to print these out and bring them to class each lecture. We will fill them in together. They are designed to supplement your text and help you organize your studying. They are not a replacement for coming to class!

Attendance: A key to doing well in any course is to come to lecture. Attendance at all lectures is not mandatory, but it is strongly encouraged if you plan on doing well in this course. Hey, I went to college. I know that 8 am seems like a dreadful time to be awake, but getting up, coming to lecture, and actively trying to absorb some information will be beneficial to your understanding of chemistry. Discover coffee or some other caffeinated beverage.
EXAMS: There will be three exams given during the regular semester and one final exam. **NO MAKE-UP EXAMS! NO EXAMS GIVEN EARLY!**
The format will be multiple choice, so bring two #2 pencils to the exam. These are not cumulative exams and will only cover the material specified on the course schedule. To see exam scores, log into student central and follow link for “results of machine scored exams”. There will be a final exam given, and it will be cumulative. For all exams, you will need your PID number as identification on your exam sheet. Additionally, you may be asked to verify your identity, so it is required that you bring your one-card to each exam. Failure to produce a one-card if asked may result in a zero on that exam.

**HOW IS YOUR GRADE DETERMINED?** *(Note: there will be no changes to HOW your final average is calculated at the end of the semester... so please don’t ask!)*

*Your final average is calculated:*
If you take all three semester examinations:

*The lowest examination grade is dropped* and the total for the semester =

\[(0.25 \times \text{exam}) + (0.25 \times \text{exam}) + (0.50 \times \text{final exam})\]

If you take any two semester examinations:

Both the exams you took will count and the total for the semester =

\[(0.25 \times \text{exam}) + (0.25 \times \text{exam}) + (0.50 \times \text{final exam})\]

If you take one semester examination:

The total for the semester =

\[(0.25 \times \text{exam}) + (0.75 \times \text{final exam})\]

If you take zero semester examinations: *(This rarely results in a passing grade—so, don’t plan to do this. REPEAT—DON’T DO THIS!)*

The total for the semester = \( (1.0 \times \text{final exam}) \)

*Grade assignments (calculating your final grade):*

<table>
<thead>
<tr>
<th>YOUR FINAL AVERAGE</th>
<th>LETTER GRADE</th>
</tr>
</thead>
<tbody>
<tr>
<td>93-100</td>
<td>A</td>
</tr>
<tr>
<td>90-92</td>
<td>A-</td>
</tr>
<tr>
<td>87-89</td>
<td>B+</td>
</tr>
<tr>
<td>83-86</td>
<td>B</td>
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<tr>
<td>80-82</td>
<td>B-</td>
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<tr>
<td>74-79</td>
<td>C+</td>
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<tr>
<td>66-73</td>
<td>C</td>
</tr>
<tr>
<td>60-65</td>
<td>C-</td>
</tr>
<tr>
<td>50-59</td>
<td>D</td>
</tr>
<tr>
<td>&lt;50</td>
<td>F</td>
</tr>
</tbody>
</table>

Homework: I will assign a number of problems from the end of each chapter. Practice problems will be posted under the “assigned problems” tab on blackboard. I will not collect, grade, or even check to see if you have attempted the homework problems. Chemistry is a quantitative science, and, as a result, you need to practice solving problems in order to score well on the exams. I will assign a collection of the red numbered end of chapter problems whose answers appear in the back of your text. You should endeavor to work as many of these problems as possible. F.Y.I-- Exam questions will look very much like the homework problems.

Important dates: check the registrar’s website *(http://regweb.oit.unc.edu/calendars/regcal079.php)* for important add/drop info. Last day to drop is Monday, 10/15
“Dr. Hogan, I need help!”: Help is available if you feel lost or like you are falling behind. Come see me. I can either help you directly or I can point you in the direction of some useful departmental resources. Where to start:

- My office hours
- After lecture (if you have a quick question that does not require in depth explanation)
- Chemistry Resource Room (CRR): Morehead labs Room 305. Free one-on-one and group help is available. CRR hours, Mon-Thurs 12 pm-7 pm.
- Online resources. I will post a number of useful websites that can help you get up to speed with chemistry and math.
- Paid tutoring. A list of graduate students who will tutor for pay is available from our student services office.

**Tentative Schedule of Lecture Topics:**

Unit 1: chapters 1-3
- Ch 1. Introduction: Matter and Measurement
- Ch 2. Atoms, Molecules and Ions
- Ch 3. Stoichiometry: Calculations with Chemical formulas and equations

Unit 2: chapters 4-6
- Ch 4. Aqueous Reactions and Solution Stoichiometry
- Ch 5. Thermochemistry
- Ch 6. Electronic Structure of Atoms

Unit 3: chapters 7-9
- Ch 7. Periodic Properties of the Elements
- Ch 8. Basic Concepts of chemical Bonding
- Ch 9. Molecular Geometry and Bonding Theories

**Policy adopted by the faculty of the Department of Chemistry on September 9, 1977:**

"Since all graded work (including homework to be collected, quizzes, papers, mid-term examinations, final examinations, research proposals, laboratory results and reports, etc.) may be used in the determination of academic progress, no collaboration on this work is permitted unless the instructor explicitly indicates that some specific degree of collaboration is allowed. This statement is not intended to discourage students from studying together or working together on assignments which are not to be collected."

**The Honor Code** is the heart of integrity here at Carolina. In brief, the Honor Code says that all students shall "Refrain from lying, cheating, or stealing," but the Honor Code means much more. It is the guiding force behind the students' responsible exercise of freedom, the foundation of student self-governance here at UNC-Chapel Hill. The University maintains an Honor Code because we believe that all members of our community should be responsible for upholding the values that have been agreed upon by the community. A written Honor Code is an affirmation of our commitment to high standards of conduct inside and outside of the classroom. It is a document to be proud of because the Honor Code belongs to all of us as much as the Bell, the Well, or our excellence in athletics (and academics too)!

**Exam Dates:**
Exam 1: September 22 (Tuesday)
Exam 2: October 27 (Tuesday)
Exam 3: November 24 (Tuesday)       Final Exam: TBA by registrar