

CHEMISTRY 102

Sections 543 - 554

Spring 2006

Lecture: Mondays, Wednesdays & Fridays
(11:30 to 12:20 Heldenfels Room 100)

Instructor: Dr. A. Mohamed

Instructor Assistant: Jeremy Andreatta

SI Leader: John Pepper

Laboratory: (Once a week in rooms on the 4th floor of HELD)

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Chem 102 is the second semester of the first-year chemistry sequence. Chem 102 is a 4-credit course. The outline of topics and activities for the lecture portion and the laboratory/recitation portion of these sections of Chem 102 are given later in this handout.

Sections 543 - 554 of Chem 102 are a part of a larger program. The First Year Chemistry Program and the Chemistry Department at Texas A&M University are committed to providing a meaningful course. Each grouping of sections of this course is independent of the other instructors' sections but we strive to cover common content, etc. The instructors strive to be approachable both inside and outside the classroom. My office hours are discussed below. Feel free to call upon me when you need help. I will hold a review session before each exam. Other review sessions may be added later. For several hours each day, teaching assistants will be available in Heldenfels Room 116 to help you.

Information related to these sections of Chem 102 can be found on the web. I will post this syllabus, sample problems, information about me, course announcements, etc. The course's web pages contain this syllabus, study materials, and additional information. Grade status can be accessed through the First Year Chemistry Program's homepage (www.chem.tamu.edu/class/fyp/fypintro.html) or by going to the TAMU Chemistry Department's homepage (www.chem.tamu.edu) then going to courses and clicking on the

First Year Chemistry Program. You will be able to check your grades confidentially (instructions for accessing the web will be provided in class).

This course is intended for students who are pursuing a degree in a field that involves a molecular view of the composition and changes that materials undergo. Such fields include majors in the life sciences; in the development and application of new materials; in environmental science, in our diets, health, or transportation; and those fields of study that strive to improve our understanding of the world we live in.

Please let me know which of our efforts are most (or least) helpful and when I can be of further assistance.

A. Mohamed

COURSE POLICIES

I. **Required Materials:**

- 1) "General Chemistry", Whitten, Davis, Peck & Stanley, 7th Ed, 2004.
- 2) "Experiences in Chemistry - II", 2nd Edition, L. Peck and V. Williamson, 2005.
- 3) Lab notebook (8 1/2" x 11" alternating white and yellow, perforated pages).
- 4) Approved eye protection. University and Departmental Regulations require that splash-proof, chemical goggles be worn by everyone present any time any experimentation is being conducted or any time equipment or chemicals are being moved by anyone in the laboratory.
- 5) Calculator suitable for use on lecture exams. You cannot use a calculator which has a multi-line screen or extensive memory. (See later discussion.)
- 6) **Four** standard (8 1/2" x 11") gray scantrons (Form No. 0-101607-TAMU). These forms are available in any of the bookstores. Turn them in, unmarked, to Room 116 during the hours that the information desk is open.
- 7) "Access Code for entry into OWL (Online Web Learning)", Thomson Learning Publishers (The code from last semester should still work.)

II. **Optional Materials:**

- 1) "General Chemistry, a Thomson Brooks/Cole Interactive CD-ROM", version 3.0 (or newer), 2004.
- 2) "Student Solutions Manual, General Chemistry", 6th Edition,

Y. Tang and W. Keeney-Kennicutt, 2004.

- 3) Laboratory apron or a nonflammable lab coat. An apron or lab coat will be required in laboratory if your shorts or skirt do not cover your knees.
- 4) "ChemSkill Builder", version 6 (or newer), James D. Spain.

III. **Course Objectives:** Through this course we hope to develop your

- a. problem-solving and critical thinking skills
- b. knowledge of the molecular world
- c. understanding of chemistry terminology
- d. ability to perform basic chemical calculations
- e. appreciation of the role that chemistry plays in society
- f. positive attitude towards chemistry

To assist you in accomplishing these objectives we provide suggested reading assignments; scheduled lectures (see attached calendar); give pop quizzes, hourly exams and a final exam; selected home work assignments; and scheduled help desk hours, help sessions, SI sessions, etc. To take advantage of the resources and to accomplish these goals, students often devote 6 – 15 hours each week to this course.

IV. **Lecture Reading Assignments:** Lectures are designed to help you develop an understanding of the material being emphasized. To get the most out of lecture, one should always read the appropriate sections before they are discussed in class. The reading assignments are shown in the calendar that appears later in this handout.

V. **Lecture Homework Assignments:** Homework problems will be assigned from the textbook and from On-line Web Learning (OWL). The textbook problems will be for practice but may be similar to those on exams. Each set of homework will be worth 10 points for a total of 30 for the semester. Homework must be submitted on time for it to be counted.

VI. **Lecture Attendance:** Students are required to attend the lectures in their registered section.

VII. **Exams:** There will be three Lecture Exams (Exams 1, 2 and 3)

given on the days indicated in the attached calendar. These exams may have a combination of multiple-choice questions that will be machine-graded and non-multiple choice questions that will be hand-graded. Lab/recitation quizzes are described later.

- 1) **Lecture Exams:** These are 45-minute exams given during the regular lecture times. Each exam is worth 100 points. Exam 1 will cover material through Section 16-6 of the textbook. Exams 2 and 3 will concentrate on material covered after the previous exam; however, review questions may also be included. **You must bring your student ID to each exam.**
- 2) **Final Lecture Exam:** The Final Exam in the lecture portion of this course will be a 110 minute, 200 point exam that may test on any materials covered during the semester. The scheduled time for the Final Exam is Wednesday, May 10 at 10:30 am–12:30 pm. **You must bring your student ID to the Final Exam.**
- 3) **Make-up Exams:** For students who have excused absences and who also notify me within one week of the missed exam, a make-up test will be arranged. Notification can be a telephone call or a short e-mail message. The make-up exams will be at least as difficult as the regular exams.

IX. **Grade Calculations:** Grades will be calculated on the basis:

LECTURE POINTS POSSIBLE:

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|-----------------------------|-----|
| Homework | 30 |
| Exams (3 @ 100 points each) | 300 |
| Quizzes | 32 |
| Comprehensive Final | 200 |
| <hr/> | |
| Total of Lecture Points | 562 |

LABORATORY POINTS POSSIBLE: (Will be adjusted so that the lab av. of each section will be between 80 & 86%.)

| | |
|--------------------------------------|-----|
| Reports (9 reports x 20 points each) | 180 |
| Quizzes (3 quizzes x 20 points each) | 60 |
| Final (written) | 40 |
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| Total of Laboratory Points | 280 |

(Adjusted for class average, then multiplied by a factor (~0.67) so that the maximum Laboratory is 187 points.)

Total Course Point = (Total of Lecture Points) + (Total of

Laboratory Points after adjustment) = 562 + 187 or 749 possible.

Likely Grades (The range of each letter grade will be assigned at the end of the semester.) In the past, typical grade ranges were:

- 620 (~83%) and greater points = an A,
- 619 to 520 points (~83 – 69%) = a B,
- 519 to 420 points (~69 – 56%) = a C,
- 419 to 320 points (~56 – 43%) = a D,
- fewer than 320 points = an F

There is no reason to expect that the ranges will be greatly different this semester.

Students with absences (excused or non-excused) who miss one or more exams without making up the missed exams should consult me. In particular, students who request a grade of “I” (Incomplete) and meet all university criteria for this temporary grade, must review the records, etc., with me before I will consider giving the grade of “I”.

X. **Lecture Exam Administration:**

- 1) Check your exam seating assignment one day in advance. **Each exam will have a different seating assignment.** Seating assignments will be posted on the bulletin boards outside of Room 100 at least 24 hours in advance of the exam.
- 2) Arrive at the lecture exam on time. Cheating or bringing in material with intent to cheat will result in a zero for the exam or a more severe penalty. Do not bring unauthorized materials into the exam.
- 3) Bring at least two sharpened #2 pencils, an eraser, and your TAMU ID card to the lecture exam. Pencil sharpeners and calculators (with certain restrictions - see (4) below) may also be brought to the exam. There must be no “sharing” of calculators during an exam. Any other questionable items must be out of sight in a briefcase, pack, purse, or sack, and stored under your desk or, if not in a closed container, you must place them at the front or back of the room before you take your assigned seat.
- 4) Students can **NOT** use calculators that are programmable or have alphanumeric capabilities. Some of the acceptable and unacceptable calculators are listed on the bulletin boards. **Any student attempting to use an unacceptable calculator will**

receive a zero for the exam.

- 5) Follow the directions given to you as you enter the exam room. **Do not write on the envelope or on the back of the scantron sheet. Failure to follow these directions may result in a withheld or zero grade.** Note: Only answers recorded on the standard gray scantron sheet or other designated sheets will be graded.
- 6) During the exam, keep all work covered as much as possible. Talking or looking around the room will result in a withheld grade for the exam.
- 7) Work carefully, but you must finish in the allotted time; exams handed in late will not be accepted. Please remain seated quietly until asked to leave.

XI. **Dishonesty:** Students are expected to be the sole source of any work submitted in their name. The utilization or submission of work of others is a violation of Texas A&M University scholastic dishonesty policies and disciplinary steps will be taken. Only **authorized** electronic or printed materials or equipment may be used in or near the classroom. As commonly defined, plagiarism consists of passing off as one’s own the ideas, words, writings, etc., which belong to another. In accordance with this definition, you are committing plagiarism if you copy the work of another person and turn it in as your own, even if you should have the permission of that person. If you have questions regarding plagiarism, please consult the latest issue of the *Texas A&M University Student Rules*, under the section “Scholastic Dishonesty.”

XII. **Copyright:** All handouts used in this course are copyrighted. By “handouts,” I mean materials generated for this class, which include but are not limited to syllabi, quizzes, exams, lab problems or study sheets, in-class materials, review sheets, and additional problem sets, notes, etc. Because these materials are copyrighted, you do not have the right to copy the handouts unless I expressly grant permission.

XIII. **Aggie Honor Code:** “An Aggie does not lie, cheat, or steal or tolerate those who do.” Upon accepting admission to Texas A&M University, a student immediately assumes a commitment to uphold the Honor Code, to accept responsibility for learning, and to follow the philosophy and rules of the Honor System. Students may be

required to state their commitment on examinations, research papers, and other academic work. Ignorance of the rules does not exclude any member of the TAMU community from the requirements or the processes of the Honor System.

- XIV. **Information Office and Help Desk:** The Information Office is at Room 116 HELD. Office Hours are Monday - Friday 9:30-12:30 p.m. and Monday - Thursday 1:30-4:30 p.m. Questions can be answered there pertaining to your course records, homework, etc. This is also where you turn in your scantron sheets. A Help Desk will also be staffed in Room 116 during these same hours. Check outside of Room 116 for changes in the schedule.
- XV **Bulletin Boards:** Special announcements will be posted on the official bulletin boards (Rooms 100, 413, and 117) and on the web.
- XVI **Office Hours:** An office hour will be held Mondays and Wednesdays from 12:30 to 2:00 p.m in room **123 HELD**.
- XVII. **Final Lecture Exam Schedule:** Our final lecture exam is scheduled for Wednesday, May 10 from 10:30 am to 12:30 pm in Room 100 Heldenfels. Please do not expect to take the final exam at any time other than its scheduled time.
- XVIII **The Americans With Disabilities Act** requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation for their disability. If you believe you have a disability requiring an accommodation, please contact the Department of Student Life, Services for Students with Disabilities in Room 126 of the Koldus Building or call 845-1637.
- XIX. **EXAM Dates:**
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|-----------------|---|
| Feb 10: | EXAM# 1 |
| March 8: | EXAM# 2 |
| April 5: | EXAM# 3 |
| May 10: | Final Lecture Exam for Sections 543 - 554 is from 10:30 am – 12:30 p.m. in Room 100 Heldenfels. |