CHEM 31A (90232): General Chemistry Fall 2016

I. Lecture

Lecturer: Alan Chant, Ph.D. **Office:** A332 Cook

Email: achant@uvm.edu Office Hours:

10:40 AM - 11:40 AM and 1:00 PM - 2:00 PM

(Mon/Wed/Fri)

Phone: 802-656-0283 *or by appointment*

Lecture Time: 9:40 – 10:30 AM

(Mon/Wed/Fri) **Location:** Marsh Life Science 235

Lecture: The lecture each week will primarily involve covering material from the assigned textbook and will include going over numerical problems. Included in this syllabus is a tentative schedule outlining lecture dates/times, text material and suggested problems sets. After each lecture, I will post my lecture notes on Blackboard. You are expected to come prepared and on time and to stay until the lecture has finished.

Textbook: "Chemistry An Atoms-Focused Approach", 3rd Ed., by Gilbert (ISBN: 9780393521443). A Solutions manual comes with the textbook. A complete set of answers to assigned problems can be found in the solutions manual. You can purchase these books from the UVM bookstore.

Problem Sets: We will be using the online program "Smartwork" for homework assignments (homework will be extra credit and be worth one quiz grade). End of chapter quizzes can be accessed in Blackboard, under 'Course Materials' (These will be graded and count towards your final grade). We will also be using "Smartwork" for the lab portion of the course. You will be given instructions for how to sign up for your account prior to the start of the semester.

You are encouraged to attempt problems from the back of the book **(these will be ungraded)** and the problems provided by 'Smartwork'.

Communications: I will be using Blackboard to e-mail and post important announcements. I will also be using this platform to post additional course resources and grades.

Teaching Assistants' Office Hours: TAs will be conducting office hours in Cook A-302 at various times throughout the week. The schedule will be posted in Cook A-302 or will be available from your TA. You can approach any of the TAs for help, not just your lab TA. You may utilize this time to get help with both lab- and lecture-related questions.

Exams: Mid-term exams are scheduled for Thursday nights from 7:35 - 10:35 PM in Marsh Life Sciences 235. There are no make-up dates. A zero grade as a result of the missed exam will be used as the dropped grade when appropriate when determining final grades. Only non-programmable calculators are permitted during exams. It is the responsibility of each student to bring their own non-programmable calculator to the exam. Calculators may not be shared. No other electronic devices, including laptops, cell phones, MP3 players, iPods, etc., are allowed. Students caught using any electronic device other then a non-programmable calculator will receive a zero for the exam.

Exam Dates:

Exam 1: 22nd September

Exam 2: 13th October

Exam 3: 3rd November

Exam 4: 1st December

Final Exam: 12th December (10:30 am - 1:15 pm) in MLS 235 (comprehensive).

II. Laboratory

A separate syllabus for the lab portion of the course is available on Blackboard.

All matters concerning the Lab should be directed to Christine Cardillo: Christine.Cardillo@uvm.edu

III. Course Grade:

Percent Ranges for Grades:

| A+ ≥ 96 | A ≥ 90 | A-≥88 | B+ ≥ 85 | B ≥ 80 | B- ≥ 77 | C+ ≥ 72 |
|---------|---------|---------|---------|---------|---------|---------|
| C ≥ 65 | C- ≥ 63 | D+ ≥ 60 | D ≥ 56 | D- ≥ 53 | F ≤ 51 | |

Points needed to obtain a specific final grade:

$$A+ \ge 960$$
 $A \ge 900$ $A- \ge 880$ $B+ \ge 850$ $B \ge 800$ $B- \ge 770$ $C+ \ge 720$ $C \ge 650$ $C- \ge 630$ $D+ \ge 600$ $D \ge 560$ $D- \ge 530$ $F \le 510$

How to Calculate Your Points:

Class = **800 total points** (80% of grade; Exams and quizzes)

Exams = 500 points (5 Exams) x 1.44 = 720 weighted points

Quizzes = **80 points**

Each exam is worth 100 points, with the exception of the final, which is worth 200 points. Therefore, the final exam counts as two midsemester exams. If your final is your lowest grade, then it will count as only one exam worth 100 points. If any one of the four midsemester exams is your lowest grade, then it will be replaced by the final, which will count as two exams (graded out of 200 points).

Example 1:

| | Exam 1 | Exam 2 | Exam 3 | Exam 4 | Final X2 | Quizzes |
|---------|--------|--------|--------|--------|----------|---------|
| Actual | 85 | 45 | 78 | 77 | [80 80] | 70 |
| Counted | 85 | 80 | 78 | 77 | 80 | 70 |

Example 2:

| | Exam 1 | Exam 2 | Exam 3 | Exam 4 | Final X2 | Quizzes |
|---------|--------|--------|--------|--------|----------|---------|
| Actual | 67 | 78 | 76 | 69 | [62 62] | 68 |
| Counted | 67 | 78 | 76 | 69 | 62 | 68 |

The laboratory portion of the course accounts for 20% of the course and is worth a total of 200 points. Grades are obtained from the lab coordinator after final grade adjustments are made. The average grade for the lab section is normally 80% or 160 points.

IV. Tentative Lecture schedule

| <u>Dates</u> | <u>Chapters</u> | | End-of-Chapter Homework Problems | | |
|-------------------|-----------------|-------------|----------------------------------|---|--|
| Aug. 29 - Sept. | 2 | 1 | | Ch1: 11,15,17,21,27,33,41,45,47,51,57,65,69,71,79,85,90,94 | |
| | | 2 | | Ch2: 11,13,21,23,25,33,43,45,49,55,61,64,67,78,81 95,97,103,105,108,115 | |
| Sept. 5 | | LABOR DAY | HOLIE | DAY | |
| Sept. 6 - Sept. 9 | 9 | 2 and 3 | | Ch3: 1,3,7,10,19,23,33,39,41,43,49,55,62,67,75,77,81,91,95,103,107,109,115,120,127,128 | |
| Sept. 12 | | LAST DAY TO | D ADD | /DROP COURSE | |
| Sept. 12 - Sept. | 16 | 3 | | | |
| Sept. 19 - Sept. | 20 | REVIEW | | | |
| Sept. 22 | | EXAM 1 | | Chapters 1, 2, 3, | |
| Sept. 22 - Sept. | 30 | 4 | | Ch4: 1,9,11,16,27,33,37,43,49,57,67,73,77, 79, 81, 85,97,105,109,117,123,127,133,135,145,159,161, 167,173 | |
| Oct. 3 - Oct. 7 | | 5 and 6 | | Ch5: 13,16,23,27,35,39,45,51,57,59,65,69,71,75,81,85,99,103,107,113,119,125,131 | |
| | | | | Ch6: 1,3,5,13,17,23,27,29,35,37,40,45,49,53,59,61,67,73, | |
| Oct. 10 | | FALL RECES | S | | |
| Oct. 10 - 11 | | REVIEW | | | |
| Oct. 13 | | EXAM 2 | | Chapters 4, 5, and 6.1-6.3 | |
| Oct. 13 - Oct. 14 | 4 | 6 | | (see above) | |
| Oct. 17 -Oct. 21 | | 7 | | Ch7: 4,13,19,21,23,27,31,35,39,41,4,47,53,57,61,63,67,69,71,73,75,79,81,85,97,103,109 | |
| Oct. 24 - Oct. 28 | 8 | 8 | | Ch8: 11,13,19,23,27,29,33,39,43,47,51,55,59,65,67,71,73,75,77,89,96,101,103,111,113,123,125,129 | |

| <u>Dates</u> | Chapters | End-of-Chapter Homework Problems | | |
|-----------------|----------|----------------------------------|---|--|
| Oct. 31 | | LAST DAY T | TO WITHDRAW FROM COURSE | |
| Oct 31 - Nov. 1 | | REVIEW | | |
| Nov. 3 | | EXAM 3 | Chapters 6, 7, and 8 | |
| Nov. 3- Nov. 1 | 1 | 9 | Ch9: 2,4,15,17,19,23,29,32,35,41,45,47,51,53,55,59,63,65,69,73,77,83,87,91,96,103,109,115,119,123 | |
| Nov . 14 - Nov. | 18 | 10 | Ch10: 3,7,13,19,21,25,29,33,43,49,53,57,61,65,67,71 73,75,77,83,85,89,91,93,95,99,105107,113,115,117, 123,139,143,147 | |
| Nov. 21 -Nov. 2 | 25 | THANKSGIV | ING HOLIDAY | |
| Nov. 28 – Nov. | 29 | 10 | | |
| Dec. 1 | | EXAM 4 | Chapters 9 and 10 | |
| Dec. 1 - Dec. 9 | | REVIEW | | |
| Dec. 12 | | Final Exam | Cumulative (Marsh Life 235; 10:30 am - 1:15 pm) | |

V. ACCESS Accommodations and Religious Holidays

Student Learning Accommodations Statement

In keeping with University policy, any student with a documented disability interested in utilizing accommodations should contact ACCESS, the Office of Disability Services on campus. ACCESS works with students to create reasonable and appropriate accommodations via an accommodation letter to their professors as early as possible each semester.

ACCESS Office: http://www.uvm.edu/~access/

Policy on disability certification and student support:

http://www.uvm.edu/~uvmppg/ppg/student/disability.pdf

Religious Holiday Policy Statement

Students have the right to practice the religion of their choice. If you need to miss class to observe a religious holiday, please submit the dates of your absence to me in writing by the end of the second full week of classes. You will be permitted to make up work within a mutually agreed-upon time.

Academic Integrity

As UVM students, you are expected to conduct yourself in accordance with the Codes of Academic Integrity and Student Rights and Responsibilities. Offenses against these codes are deemed serious and insult the integrity of the entire academic community. Any suspected violations of these codes are taken very seriously and will be forwarded to the Center for Student Ethics and Standards for further intervention.