CHEMISTRY 1212K
Course Syllabus, spring 2012

Prerequisite: Chemistry 1211 (minimum grade of C)

Text: Chemistry Custom Version for GA State University (Taken from Chemistry: A molecular Approach by Nivaldo Tro) with **Mastering General Chemistry**

Course id: FINNEGAN1212spring2012

Required Laboratory Materials: 1) a *stitched binding* notebook for laboratory work (*note*: spiral, cemented, or loose-leaf notebooks are **not** acceptable!); 2) safety glasses or goggles

Instructor: Dr. Steffan Finnegan
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Office: 202 Courtland North

Office Hours: TBD.
Lecture: TR at 5:30 - 6:45 pm room 102 Library South
Note regarding office hours: If you come to office hours bring your book, your lecture notes and your attempt at the homework
Chapters to be covered: 11 - 18

Week Beginning	Tuesday	Thursday	Friday
1/9	Orientation	Lecture	
1/16	Lecture	Lecture	
1/23	Lecture	Lecture	
1/30	Lecture	Exam 1	
2/6	Lecture	Lecture	
2/13	Lecture	Lecture	
2/20	Lecture	Exam 2	**2/24 Last day to withdraw with a**
2/27	**Spring Break – No class**		
3/5	Lecture	Lecture	
3/12	Lecture	Lecture	
3/19	Lecture	Lecture	
3/26	Exam 3	Lecture	
4/2	Lecture	Lecture	
4/9	Lecture	Lecture	
4/16	Exam 4	Lecture **(Last day of class)**	
4/23	**Final exam**		

Final Exam is Tuesday April 24 at 4:15 pm. Duration: 110 min.

Tentative Exam Plan:

Ch 11 and 12 → Exam 1(2/2-2012)
Ch 13 and 14 → Exam 2 (2/23-2012)
Ch 15 and 16 → Exam 3 (3/27-2012)
Ch 17 and 18 → Exam 4 (4/17-2012)

Learning outcomes

The goals of this course are set forth by the chemistry department.

The student should demonstrate a general knowledge of the chemical concepts of kinetics, equilibria, buffers, thermodynamics, electrochemistry and states of matter.
The student should demonstrate the ability to successfully apply math skills previously learned to chemical systems.
The student should demonstrate the ability to apply chemical principles to problems in physics, biology and medicine.

Grading: The course grade is determined according to the following point distribution:

Major Exams	(Best 3 of 4)	201 pts
Quizzes	(Best 8 /10)	135 pts
Homework		64 pts
Lab		200 pts*
Final Exam		200 pts
Total		800 pts

* You must attend your laboratory section – at the end of the semester your laboratory instructor will give me a list of students in their section and their laboratory grades

Letter grades are assigned based on the following scale (which may be varied slightly):

≥90%	=	A
≥80% to <90%	=	B
≥67% to <80%	=	C
≥57% to <67%	=	D
<57%	=	F

Grades: There will be four major examinations, chapter homework assignments and chapter quizzes. All of these together make up 2/3 of the lecture grade. **No make-up examinations or quizzes will be given.** Missed examinations will be recorded as a *zero*. The remaining 1/3 of the lecture grade will be based on the final

examination, a standardized, *multiple choice* examination covering *all the material from CH1211K and CH1212K.* This test is provided by the American Chemical Society (ACS) and is nationally normalized. *To receive a passing grade in this course, the student MUST 1) take the final examination, and 2) and meet certain minimum requirements in the laboratory portion of the course*.

Examinations: The best 3 of the 4 examination grades will be counted toward the student's grade. Each student is allowed to drop one exam grade. **There will be no make-up exams.**

Quizzes: These quizzes will test mostly algorithmic problem solving, in other words, the student's ability to set up and solve a numerical problem. The best 8 quiz grades out of 10 will be counted toward the final grade. **There will be no make-up quizzes**. The purpose of these quizzes are 3 fold.

1. The quiz should primarily be used for the student to self-assess their learning and for the instructor to provide feedback to the student.
2. A weekly quiz reinforces the need for students to continually "keep on top" of the material covered in lecture.
3. It gives the instructor the ability to go back over material that a large number of students are having difficulty with thus tailoring the class toward the students.

In grading in-class quizzes and examinations, partial credit will be given for *correct* set-up of numerical problems, but answers are expected *in the proper units* and expressed *to the proper number of significant figures*. Use of electronic calculators on examinations is not required, but is strongly encouraged. A scientific calculator with capabilities for square roots, logarithms (*base-10 and natural* is best), exponent capabilities, and memory registries is recommended.

Homework: Will be assigned on Mastering Chemistry, students are responsible for checking due dates, availability etc. Homework should be submitted online using "Mastering General Chemistry". Homework that is "handed-in" in class will not be accepted. Homework assignments should be submitted by the due date and time and will not be reopened after the due date. Mastering Chemistry is going to be the primary resource for students to practice problem solving.

Class Attendance and Preparation: Attendance in class is **not** recorded (with some few exceptions). However, students are responsible for class preparation and for any material presented in the course of the lectures *whether or not it is contained in the textbook*. Chemistry is a *highly* structured course, with each new topic based on others previously developed. Thus it is *critical* for students to keep *consistently* up-to-date in their readings and assignments. To fall even one class period behind is to risk considerable difficulty in mastery of future material. Therefore students should

1) review previous material, especially if it was not perfectly understood
2) complete reading assignments *before* the lecture in which the topics are covered, or at least immediately after the lecture
3) complete assigned problems and exercises on time, with an emphasis on mastery of concepts and principles involved rather than looking for a formula that will give the expected answer (*remember that the question can be asked in a different way and not <u>just</u> with different numbers!*)

Students are expected to attend all classes and laboratories (*even when attendance is not recorded*) and are responsible for all assignments and materials presented. In the event of unavoidable absences, it is the responsibility *of the student* to find out what materials were covered or what assignments made in his or her absence.

The University requires that faculty members must, on a date after the midpoint of the course to be set by the Provost (or his designee)

1. give a WF to all those students who are on their rolls but no longer taking the class and
2. report the last day the student attended or turned in an assignment.

Cell Phones and Beepers: In consideration of your classmates, turn off all sound alerts during every lecture and examinations. There will be no exceptions

Chemistry Department Policy on Student Conduct and Integrity: The ***Georgia State University Policy on Academic Honesty*** is in force in this course. This includes but is not necessarily limited to infractions in the area of *plagiarism*, *cheating on examinations*, *unauthorized collaborations*, *falsification*, and *multiple submissions*. This policy is published in *On Campus: the Student Handbook*, which is available to all members of the university community.

All examinations must represent your individual effort, with no unauthorized aid. To either *give* or *receive* unauthorized information during an examination is cheating, as is the use of *any* unauthorized supplementary material. In addition all laboratory work performed in conjunction with this course must represent your individual effort. Only original data obtained by your own *in-laboratory* experimentation are permitted to be used, except when *expressly authorized* by your laboratory instructor. Data from supplementary sources, handbooks, reference literature, etc. must be *clearly referenced* (title, author, volume, pages(s), etc.). Falsification or destruction of data constitutes cheating as well. Conduct disruptive of class, examinations, or laboratories *or* falsification or destruction of information related to chemistry courses will be taken as a violation of the policies of the Board of Regents of the University System of Georgia and the Georgia State University Student Code of Conduct, Section 6.0. Any suspected offenses may be referred to the Chairman of the Department or the Dean of Students for appropriate disciplinary action.

Syllabus and Assignments: The foregoing provides a *general* plan for the course, *deviations from which may be necessary*. The instructor will announce any such changes in class. One of the best ways to prepare for examinations in general chemistry is to work as many problems as possible. This includes problems from the end of chapter problem sets as well as the Mastering General Chemistry Problem sets