

CHEMISTRY 1212K
Course Syllabus, Spring 2014

Text: Chemistry: A molecular Approach by Nivaldo Tro second edition with Mastering General Chemistry

Course id: FINNEGANspring2014

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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Phone: (404) 413-5569
Office: 202 Courtland North
Office Hours: Friday 3 – 5 pm.
Lecture: MWF at 11:00 - 11:50 am room 5 Aderhold Learning Center

Email is the best way to communicate with the instructor. While sending an email, write the name of the course, and then the subject. For example, if you want to write about arranging an appointment, the subject should be "1212- appointment". *Please send email from GSU email. (most other emails will get caught in the GSU Spam filter)

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 and parts of 19

Course Schedule (THIS IS A GENERAL PLAN FOR THE COURSE; DEVIATIONS MAY SOMETIMES BE NECESSARY)

Week Beginning	Monday	Wednesday	Friday
1/13	Orientation	Chapter 11	Chapter 11
1/20	MLK Day – No class	Chapter 11	Chapter 11
1/27	Quiz 1 - Chapter 12	Chapter 12	Chapter 12
2/3	Chapter 12	Chapter 12	Quiz 2 + exam 1 review
2/10	Exam 1	Chapter 13	Chapter 13
2/17	Chapter 13	Chapter 13	Quiz 3 + chapter 14
2/24	Chapter 14	Chapter 14	Chapter 14
3/3	Exam 2 (3/4 last day to withdraw with a W)	Chapter 15	Chapter 15
3/10	Chapter 15	Chapter 15/16	Quiz 4 + chapter 16
3/17	SPRING Break – No class		
3/24	Chapter 16	Chapter 16	Chapter 16
3/31	Exam 3	Chapter 17	Chapter 17
4/7	Chapter 17	Chapter 17	Quiz 5 + chapter 18
4/14	Chapter 18	Chapter 18	Chapter 18
4/21	Exam 4	Chapter 19	Final review

4/28		Final exam	
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Wed 4/30 Final Exam, starting at 10.45 am till 1.15 pm in room 5 Aderhold Learning Center

Exam Plan:

Ch 11 and 12 → Exam 1(2/10-2014)
 Ch 13 and 14 → Exam 2 (3/3-2014)
 Ch 15 and 16 → Exam 3 (3/31-2014)
 Ch 17 and 18 → Exam 4 (4/21-2014)

Online quizzes (D2L)

Chapter 14 – 3/2-2014 at noon
 Chapter 16 – 3/30-2014 at noon
 Chapter 18 – 4/20-2014 at noon
 Chapter 19 – 4/29-2014 at noon
 Final review quiz (worth 20 points) – 4/29-2014 at noon

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 covered.

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 (67 pts. each) (Best 3 of 4)	201 pts
Quizzes in class (15 pts. Each) (Best 4 of 5)	60 pts
Quizzes on Desire2Learn (10 pts. Each) (Best 4 of 5)	40 pts
Homework (mastering chemistry)	99 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):

<u>Total Course Points Earned</u>	<u>Letter Grade</u>
>765	A+
720-764	A
696-719	A-
684-695	B+
640-683	B
616-639	B-
584-615	C+
560-583	C
536-559	C-
480-535	D
<480	F

Grades: There will be four major examinations, 10 chapter homework assignments and 10 chapter quizzes. All of these together make up 2/3 of the lecture grade. **No make-up examinations or quizzes will be given. Students are responsible for checking due dates/times online for both the online homework and quizzes.** Under no circumstances will extensions be given. (ie, if you computer crashes the day of assignment being due, no extensions will be granted, you have to start early to avoid these type of problems). Missed examinations/assignments 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*. 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.

There are no extra credit assignments for this class.

Examinations: The three best of the four examination grades will be counted toward the student's grade. There is 1 dropped exam grade. **There will be no make-up exams.**

5 quizzes will be in-class quizzes and 5 quizzes will be given on Desire2Learn. Students are responsible for checking due dates on Desire2Learn.

In class 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 four quiz

grades out of 5 will be counted toward the final grade. **There will be no make-up quizzes.**

Online quizzes: These in class quizzes will be of a similar format as the examinations, in other words, they will be multiple choice and can be both definition type questions as well as algorithmic problem solving. The best four quiz grades out of 5 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 specific needs of the majority of the students

In grading in-class quizzes, 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. **Programmable/graphing calculators are not allowed.**

The purpose of the dropped quizzes and exam policy is for those unforeseen events preventing students taking the test. It's not there to give students a “free” attempt, as such under no circumstances will a make-up be given.

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. Homework corresponding to the exam is due at midnight the night before the exam. DO NOT wait to the last minute to do the homework, stay current with it and know it takes a on average 4 hours to complete entire homework.

Points earned for homework: $(\text{mastering chem. points earned}/147) \times 99$.

Late submissions are penalized by a 10% reduction per day. Usage of hints on homework is penalized by 5% per hint. Answering questions in hints are not credited towards final score.

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 just with different numbers!*)
- 4) the average student needs to do 12-15 hours of work outside of class (20:80 split between reading and problem solving) in order to earn a passing grade for this class. Students earning high B's and above typically do more than this.

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