

## Chemistry 7900

Course Syllabus Summer 2014

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**(Please send emails from your GSU email and write the course number in the subject)**

Presentation topics in order of presentation:

1. \*Units, measurements, significant figures, exponential and decimal notation
2. \*Mathematical operations, unit conversions
3. Structure of atom (classical mechanics approach), atomic number, mass number, isotopes, atomic mass
4. Electron arrangement in atoms (quantum numbers, electronic configuration, frequency/energy/wavelength calculations)
5. Periodic table and \*periodic trends
6. \*Ionic and Covalent bonding,
7. \*Nomenclature (Ionic, covalent, acids)
8. \*Molecular geometries
9. \* Intermolecular forces
10. Chemical equations, balancing, types of chemical reactions
11. Moles and molar mass
12. \*Mole relationships in chemical equations
13. Solids, liquids and gases
14. \*Solutions
15. \*colligative properties

### Point distribution:

In class exams (75 x 2)	150
In class presentations (20 x 5)	100
Assignment questions (25 x 5)	125
Assignment answers (25 x 5)	125
<b>Total</b>	<b>500</b>

### **Grading:**

95-100: A+	78-79: B-
90 -94: A	73-77: C+
87-89: A-	65-72: C
85-86: B+	60-64: C-
80-84: B	57-59: D
	<57: F

### **Class Schedule:**

40 min class presentation  
10- 15 min discussion  
10 min break  
Discussion and group problem solving

**Assignments:** Every presentation will be followed by an assignment that will be due the next class. It is in the best interest of the student to turn in the assignment on time. The assignment will have 10 questions. 5 questions will be given by the instructor and 5 given by the presenter.

**Examinations:** Each exam will be held for 90 min followed by discussion. There will be no make-up or advanced exams. Missed exams will be recorded as zero.

**Examination 1: June 20<sup>th</sup>, 2014**

**Examination 2: July 21<sup>st</sup>, 2014**

**Class presentations:**

1. One student presents during every class.
2. Presentation schedule will be decided on 9<sup>th</sup> June.
3. Each presentation will be for 40 minutes
4. After the presentation, the student will discuss his/her concerns about the topic
5. Rubric for presentations:
  - a. Preparation (5 points)
  - b. Delivery of instruction (5 points)
  - c. Concerns about the topic-discussion (5 points)
  - d. Material (power point slides, videos, handouts etc.) (5 points)

**Cell Phones and Beepers:** In consideration of your classmates, turn off all sound alerts during every lecture and examinations. If you must have the cell phone during the daily lectures, please set it to ring on vibrate mode (silent). If you need to be on call during an exam, please inform the instructor and leave the phone with the instructor.

**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.

**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.**