

CHEMISTRY 1050 Course Syllabus, Spring Semester 2015

Prerequisite: Basic algebra

Please read this entire syllabus and pay attention to the details. You need to hand in a signed copy of statement of understanding of the content of this syllabus.

A complete version of this syllabus is available at: chemistry.gsu.edu
Click on **current students** (left column), click on **current syllabi**, click on **Chem 1050**.

Lecture: MWF 9:00-9:50 a.m., Room 200 Langdale

Textbook: "Basic Chemistry", 4th Edition by Timberlake & Timberlake, Prentice Hall.

Instructor: Dr. C-N Ho **Office:** 234 Kell **E-mail Address:** cho@gsu.edu

Office Hours: W 11:00-12.00 noon and by appointment

Telephone: 404-413-5889

Exam schedule: (Quizzes may be given unannounced)

Exam 1 (1, 2, 3,)	1/30, Friday;	Exam 2 (4, 5, 6),	2/13, Friday
Exam 3 (6, 7, 8,)	3/06, Friday;	Exam 4 (9, 10, 11),	4/03, Friday
Exam 5 (9, 10, 11),	4/24, Friday		

Final American Chemical Society standardized test, 5/1, Friday, 9.00-9.45 am, Langdale 200

Tentative Course Points: Course points are calculated as follows:

Best 4 of 5 exams	400 points
Final exam (standardized, comprehensive test)	100 points
Total	500 points

A+ > 475	A 450-474	A- 435-449	B+ 420-434	B 395-419	B- 380-394
(>95%)	90-94.8%	87-89.8%	84-86.8%	80-83.8%	76-79.8%)

C+ 360-379	C 330-359	C- 300-329	D 260-299	F < 260
(72-75.8%	66.0-71.8%	60.0-65.8%	52-59.2%	<52%)

Electronic Calculators: Use of programmable calculators **IS NOT ALLOWED** in this course. Students will need a non-programmable scientific calculator (<\$10.00) to use during all tests. A scientific calculator with logarithm, exponent, and memory capabilities is recommended.

CELL/SMART-PHONE CALCULATORS ARE ALSO NOT ALLOWED

A PERIODIC TABLE WILL ALSO BE PROVIDED ON EXAMS

Assignments, Exams, and Quizzes:

Students need to write down their GSU Panther I.D. card number when taking exams and quizzes. The instructor reserves the right to assign seating during exams and quizzes.

Cell-phones need to be kept either in purses or book-bags during exams or quizzes; of course, they should be turned off at all times.

There are five (5) 100-point exams. In addition, **unannounced** quizzes may be given. The lowest score of the 5 exams will be dropped

ABSOLUTELY NO MAKE-UP EXAM WILL BE GIVEN

No make-up will be given regardless of the reason for absence as the lowest score will be dropped. Students are responsible for consulting with the instructor of any discrepancy in exam scores within a week after the exam is given back. After one week all scores are final.

THE FINAL EXAM MAY BE A TIMED, STANDARDIZED AMERICAN CHEMICAL SOCIETY (ACS) COMPREHENSIVE EXAM, AND WILL COUNT AS 1/5 OF THE TOTAL LECTURE GRADE. THE SCORE ON THE FINAL WILL **NOT BE DROPPED.**

Communicating with instructor:

If you need to communicate with me by e-mail, please make sure to include the following:

1. a subject line,
- 2 identify yourself with full name, and that
- 3 you are a Chemistry 1050 student.

Failure to do so will result in the loss of your message. I had been instructed to avoid opening an unknown email.

PLEASE, PLEASE DO NOT SEND ME EMAIL VIA D2L AS I WILL NOT BE ABLE TO RESPOND TO IT. THE REPLY WILL BE RETURNED BY OUTLOOK AS UNDELIVERABLE EMAIL. THE INSTRUCTOR WILL NOT BE RESPONSIBLE FOR SUCH EMAILS.

Class Attendance:

Students are expected to attend all lecture classes.

Students are required to take all tests, and the course **final exam which cannot be dropped.**

Sometime after the mid-point of each course (an exact date will be set by the Provost or his designee), the University now requires faculty members to:

- 1) Give an F to any student who is on the course roll but no longer attending class and
- 2) Report the last day the student attended class or turned in an assignment.

Students who withdraw from the course themselves by the mid-point of the course will receive a W under this policy.

Students who are withdrawn by the University for nonpayment and other reasons may petition the Departmental Chair for reinstatement into their class.

Cancellation of Classes:

Official closure of the university is determined by the university administrators. This sometime occurs due to inclement weather. Notification of closure is by broadcast on local radio and television stations. Should closure results in cancellation of chemistry class or examination periods, resumption of the missed activities would occur at the next regular class period when the university reopens or as determined by the course instructor.

Should a professor is unable to meet the class for reasons other than the one noted above, another professor would normally meet the class as scheduled. However, on rare occasions, conditions could require cancellation of class or examination periods. In such cases, there would be official notification of cancellation made to all affected students. Should notification be made through posted notices in the classroom or via other means, the students have the final responsibility to confirm the authenticity of the cancellation by calling the Chemistry Department office: 404-413-5500.

CHECK YOUR GSU e-mail FOR IMPORTANT MESSAGES!

GSU Policy Regarding Student Conduct and Integrity:

See section 4909 in <http://www2.gsu.edu/~wwwfhh/fhh.html>

The Georgia State University Policy on Academic Honesty is in force in this course, including, but, not necessarily limited to, infractions in the areas of Plagiarism, Cheating on Examinations, Unauthorized Collaboration, Falsification, and Multiple Submissions. The university's policy is published in the, On Campus: The Student Handbook, available to all members of the university community. Therefore, all tests taken must represent your individual unaided efforts. To receive or offer information during an examination is cheating. The use of unauthorized supplementary materials during tests is also cheating. Conduct or actions that disrupt class or test periods or falsification of information related to chemistry courses by any student will be taken as violation of the policies of the Board of Regents of the University System of Georgia and the GSU Student Code of Conduct, Section 6.0. Any suspected offenses may be referred to the Department Chair or the Dean of Students for appropriate disciplinary action.

A SIMPLE GUIDE FOR CITIZEN CHEMISTRY

OBJECTIVES OF THE COURSE

TO LEARN SOME OF THE BASIC PRINCIPLES OF CHEMICAL SCIENCE AND TO UNDERSTAND HOW CHEMISTRY WORKS AND ITS IMPORTANCE IN CITIZENSHIP.

ALSO, THIS CLASS IS DESIGNED SPECIFICALLY TO PREPARE THOSE STUDENTS WHO WISH TO CONTINUE STUDY A HIGHER LEVEL CHEMISTRY COURSE. THE REGULAR EXAMS OF THE CLASS REFLECT THIS OBJECTIVE. HOWEVER, THE FINAL HAS AN ENTIRELY DIFFERENT PURPOSE.

Chemistry is involved with so many things and events one encounters daily that it is unwarranted ignorance and poor citizenship, if one does not know how they come about. Chemistry is behind many things we use and come across every day. Cosmetics and fragrances; food preservatives and diets; plastics, fossil fuels, pesticides and pollution; drugs, herbs, and diseases; all have intriguing chemistry behind them. Above all, a living organism is essentially an intricate chemical system in which the fundamental units, the cells, sustain and reproduce themselves by being the most efficient and brilliant chemists the universe has ever known. In addition, many of these chemical events, substances and their applications have profound effects on our well-being. This course will give you the background and principles in chemistry to have a working understanding of them. We would like to become better informed users and consumers of resources and products of chemical innovations.

SCIENTIFIC DEFINITIONS, TERMS, STATEMENTS, AND LAWS

Like any new subject, we have to learn the "jargons" for that field. In chemistry as in any sciences, names, terms, and words that are used daily are more precisely and strictly defined or stated so that ABSOLUTELY NO AMBIGUITY exists. There are many new words we need to know the exact meaning of and we will be asked to state their definitions ACCURATELY, and often to write them VERBATIM, EXACTLY THE WAY THE BOOK OR INSTRUCTOR STATES THEM.

MATH AND CALCULATIONS

We cannot do well without the ability to do simple arithmetic and to translate problems into quantitative terms. Musicians need to know how to count the duration of notes they have to execute. Business people always need to know their market through surveys, objective statistical analysis, cost and performance analysis, and always talk of bottom line. We take prescription drugs of correct dosage to have optimum effectiveness without serious side effects. Even the golfers need to know how to deal with negative numbers! For all these activities we must understand simple mathematics and be able to apply them to solve problems. Understanding and knowing how to do simple math often means less stress and better quality of life.

As a physical science, experimentation and measurements are the backbone of understanding chemistry. In this course calculations and problem-solving will be required. **We will do lots of them!** We need to know how to interpret chemical problems, transcribe them into mathematical problems, and use arithmetic and algebra to obtain answers.

ATTENDING LECTURES

Questions on exams require a thought process which is shown through give-and-take discussions that can only be done in class. Hints, pointers, and emphases are given during lectures. Many research studies concluded that poor attendance adversely affected the letter grade that an average student received. One misses a great deal for not attending lectures.

HOME WORK AND PROBLEM-SOLVING

IT IS IMPOSSIBLE TO OVER STRESS THE IMPORTANCE OF FAITHFULLY COMPLETING AS MANY WITHIN AND END-OF-CHAPTER PROBLEMS. ONE CANNOT LEARN SCIENCE WITHOUT WORKING ON THE PROBLEMS.

These problems may not be identical to some exam questions you will encounter, but the process of doing them and realizing you do not understand certain topics will help you know and remember the materials better. You will find that solving the problems and having to think through the contents help in a subtle but sure way.

Do **ALL** the in-chapter “concept check”, “sample problem”, and end-of-chapter “key terms”, “understanding the concepts”, and as many of the problems as one can. Read Section 1.3 page 11-13 on some strategies to study chemistry effectively. Also be sure to look at every “**concept map**” given at the end of each chapter.

POINTERS ON HOW TO DO JUST FINE IN CHEMISTRY

It is important to realize at the very beginning that science builds upon previous knowledge and basic principles. It is extremely important that one understands the subject matter **RIGHT FROM THE START. IF ONE FALLS BEHIND, IT TAKES A MUCH GREATER EFFORT TO CATCH UP BECAUSE EVERY LATER TOPICS RELY ON PRINCIPLES AND FACTS OF PREVIOUS TOPICS, WHICH CAN PILE UP EXTREMELY RAPIDLY AND BECOME OVERWHELMINGLY DIFFICULT.**

It is **easier** and better to make an effort to know the subject matter each step of the way. Always read ahead before the lecture, even if you do not understand a thing being read. Reading through the material to get an exposure so that it will seem familiar when the material is lectured in class. Read the text again immediately that evening to have the concept sink in while it is still fresh in your memory. It is impossible to cram in a science course. Studying 12 hours over the weekend is a great deal less effective than studying the subject 2 hours daily. Cramming before the exam tends to cause greater confusion because there is so much material to know and remember. This often leads to panic at exam time. **Once panic, the mind blanks out, THE SUREST WAY AND AN ABSOLUTE GURANTEE FOR FAILING AN EXAM.**

BE SURE TO READ THE TEXT BOOK FAITHFULLY. YOU NEED BOTH THE LECTURE NOTES AND THE TEXT TO DO WELL. TIME IS LIMITED, THE INSTRUCTOR CANNOT LECTURE AND EXPLAIN EVERYTHING IN THE BOOK IN CLASS. THE STUDENTS WILL BE HELD RESPONSIBLE FOR ALL THE MATERIALS IN ASSIGNED CHAPTERS.

CHEMSITRY 1050, SPRING 2015 STATEMENT OF UNDERSTANDING (student copy)

I have read the entire syllabus, and have completely understood the grading system and all policies and pertinent information on this course provided in it. Furthermore I also have read and understood the summarized information given below:

1. The course syllabus provides a general plan for the course. We will attempt to cover chapters 1-14. However, deviations may be necessary and sections of some chapters may be omitted and not covered or tested. Thus some chapters may be covered only partially. Other chapters in the text book will not be covered in this course.
2. Please note the exam dates and that the final is a **COMPREHENSIVE STANDARDIZE TEST**. Also quizzes may be given **unannounced**.
3. **No make-up of any kind will be given.** If a student misses an exam or a quiz, the score for the given exam/quiz is zero. If an exam is missed, that exam will be considered the lowest score one and will be dropped.
4. All exam scores must be resolved within one week of returned. After that the scores are final.
5. Students need to write down their GSU Panther ID card numbers when tests of any kind.
6. The instructor reserves the right to assign seating during exams and quizzes.
7. Use of cell- or smart-phone and programmable calculators is not allowed on exams or quizzes. **Please remember to bring your scientific calculator to every class lecture!**
8. During class lecture and exams/quizzes, cell- and smart-phones need to be kept in purses or book bags/packs and be turned off.
9. **PLEASE, NO TALKING OR LOOKING AROUND DURING TESTS OF ANY KIND REPEAT OFFENDERS WILL HAVE THAT SPECIFIC TEST FORFETED.**
10. Hats, hoods, and jackets must be put away during exams/quizzes

FINAL GRADES WILL BE AVAILABLE ONLY THROUGH GOSOLAR

Name (print in ink): _____ Panther ID: _____

Signature (in ink): _____ Date: _____

CHEMSITRY 1050, SPRING 2015 STATEMENT OF UNDERSTANDING (instructor copy)

I have read the entire syllabus, and have completely understood the grading system and all policies and pertinent information on this course provided in it. Furthermore I also have read and understood the summarized information given below:

1. The course syllabus provides a general plan for the course. We will attempt to cover chapters 1-14. However, deviations may be necessary and sections of some chapters may be omitted and not covered or tested. Thus some chapters may be covered only partially. Other chapters in the text book will not be covered in this course.
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