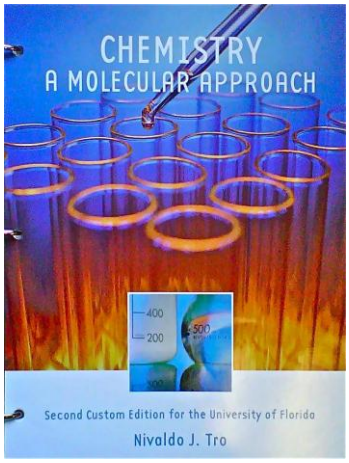
Syllabus

Introduction to Chemistry
CHM 1025 - Fall 2011

Section	Period	Instructor	Office Hours	Email
6030	TR 4th	Ciera Gerack	Flint 257 T 11:30 am -12:30 pm R 1:00-2:00 pm	gerack@chem.ufl.edu
6030	TR 4th	Ashlyn Dennis	Flint 257 T 9:30 -10:30 am R 9:30 -10:30 am	dennis@chem.ufl.edu

*Email Ciera or Ashlyn using the above emails and not on Sakai.

TEXTBOOKS: 1) "**Chemistry a Molecular Approach,"** 2nd Edition, Tro, Pearson Publishers, The Tro textbook may be purchased in a loose-leaf **packet** at a price significantly reduced from that of the hardcover texts. The Mastering Chemistry electronic homework access code is in the packet along with your clicker, remote response device, and worksheets. Copies of all textbooks will be on Reserve at the Marston Science Library - Ask at the circulation desk.



The following Gainesville bookstores have received copies of the Tro's CHEM 1025 packet:
1) Follett (UF Campus)
2) Florida Bookstore (off-campus)

OTHER MATERIALS NEEDED: Calculator (**Non-graphing)**, RF remote ("Clicker") (available at the bookstore), **e- HOMEWORK (eHW)** (see below).

INFORMATION: CHM 1025, Introduction to Chemistry, is a course designed to help students understand the basic concepts of chemistry and master the skills necessary to succeed in the main stream General Chemistry sequence, CHM 2045-2046. To succeed in this course, the student must spend adequate time studying the available materials. These include the book and the Mastering Chemistry homework. The course will meet twice a week for live discussions and feedback. Attendance is not taken but strongly encouraged. The schedule given below suggests the relevant chapters in the Tro book that the student should work on during specific weeks in the course. Check the Sakai CHM 1025 workspace for additional electronic versions of the worksheets.

*** *In order to pass this class and progress to CHM 2045, you must earn a grade of C or better!* ***

PREREQUISITES: High School Algebra II or MAC 1147 or the equivalent. Students whose math-algebra background is weak should pass MAC 1147 with a minimum grade of C before enrolling in CHM 1025.

TIPS: Chemistry is very much a "learn by understanding" subject. Because of this you must work hard in this course to do well. That means you should read the textbook and do the Mastering Chemistry homework sets until you understand! Then you should work extra problems from the book or Mastering Chemistry homework to test your understanding. *The more problems you do, the more likely you are to succeed*. Attendance is not taken but strongly encouraged.

Mastering Chemistry (eHW): Sections of the e-homework will be assigned weekly. **You may repeat questions 6 times in order to master them**. **eHW** can be accessed through the mastering chemistry website, http://www.masteringchemistry.com/. To purchase the **Mastering Chemistry** access code online (not necessary, if you bought the **eHW** access code at a bookstore), go to http://www.masteringchemistry.com/. Do not get caught in a last minute rush and then experience a problem or outage. A schedule with due dates is posted below. No extensions will be given! Do not get caught in a last minute rush and then experience a problem or outage, often certain web browsers have issues that can be resolved by trying a different browser. Technological setbacks will not result in extensions because you have ample opportunity to work on the sections before the due date. All of the assignments are available to begin now. You are allowed to do each assignment (*except the last assignment*) after the deadline. However, 10% will be deducted per day after the deadline. All assignments must be completed by 11:59 pm December 8th. The course ID is **GERACK6030F11**. The due dates are as follows:

TITLE	CATEGORY	DUE DATE/TIME
Introduction to MasteringChemistry	Homework	09/01/11 at 11:59pm
Mathematics Review	Homework	09/01/11 at 11:59pm
Assignment # 1 Chapter 1 Matter	Homework	09/06/11 at 11:59pm
Assignment # 2 Chapter 2 Atoms Ions and the Periodic Table	Homework	09/11/11 at 11:59pm
Assignment #3 Chapter 3 Chemical Compounds	Homework	10/04/11 at 11:59pm
Assignment # 4 Chapter 4 Chemical Composition	Homework	10/18/11 at 11:59pm
Assignment # 5 Chapter # 6 Thermochemistry	Homework	10/27/11 at 11:59pm
Assignment #6 Chapter 9 Chemical Bonding I: Lewis Theory	Homework	11/27/11 at 11:59pm
Assignment #7 Chapter 10 Chemical Bonding II	Homework	12/08/11 at 11:59pm

**** Please note, the 340 points on Mastering Chemistry will be reflected by 100 class points. That means that the number of MC points you earn, divided by the total 340 possible MC points, multiplied by 100 class points possible will equal the number of points you will see reflected in your final grade. Therefore it is very important that you not stop working the**

Mastering Chemistry questions after you earn 100 Mastering Chemistry points or you will only see 29.4 class points for your Mastering Chemistry grade.

Sakai: To access Sakai, you should go to the website: http://lss.at.ufl.edu, click on "e-Learning in Sakai" enter your GatorLink username and password and then click "Log in." To log in, you MUST use your GatorLink username and password. If you do not yet have one, you must obtain one. If you have any problems with your GatorLink name or password, you should contact the Help Desk at 392-HELP, or go to 520 CSE. It is your job to check E-learning every Monday, Wednesday, and Friday. You are responsible for knowing all information that is posted on the announcements.

In-Class Clicker Quizzes: There will potentially be daily in-class quizzes, which we call clicker questions. For these, you will need a HITT-RF remote control ("clicker"). They are available for purchase at the UF bookstore and are bundled with the Tro packet. To register your remote, you should complete the assignment "Clicker Registration" in Sakai. Each question correctly answered receives 2 points and wrong answers receive 0.5 points. The 70 class points will reflect the percentage of the possible points (2 points per question for each question done in the semester). Consequently, it pays to come to class. **** This is different than previous semesters. Your Sakai grade will have two places for clicker points. One will reflect the total points you have earned and not be included in your grade calculation on the website. The other place in Sakai will show the actual percent of the 70 points you have earned based on the possible points completed. **This second value will change after every clicker quiz. It is important to be sure that your tally of total points increases as you complete clicker questions. It is **your responsibility** to be sure your clicker works, you will not get extra points later because of a faulty clicker or dead batteries. There will be ABSOLUTELY NO writing down your answers on paper to manually hand in. So bring your clicker to each and every class!! **You must have the clicker by August 25, the second day of class.**

WORKSHEETS: A worksheet is a set of questions/problems related to the material to be studied that class period. There are 27 worksheets in all. They are available in the Tro packet obtained at the UF bookstore or you may download the worksheets from Sakai in the resources section (this may help for a few worksheets that integrate color into the question). Use the resources tab to find the worksheet folder. Worksheets correspond to the lectures. Lecture number and worksheet number go together. Answers to problems in the worksheets will be released after their use in class. Students will be required to complete the worksheets and turn them into their peer mentors. Each worksheet is worth 2 pts. Half credit may be given for worksheets turned in one class after their due date. Worksheets will be graded as full, half or no credit based on the level of completion.

EXAMS: Four cumulative progress exams (from 8:20 – 10:20 PM on the dates shown in the Calendar) and a cumulative final exam will be given. The dates for the exams are **Sept. 13th, Oct. 6th, Nov. 1st, and Nov. 29th.** Your lowest progress exam score (not the final!) will be dropped. All exams will have 25 questions and multiple choice. All progress exams will be given in the evening on the date listed on the syllabus. **No makeup progress exams will be given for any reason**. Conflict exams may be given earlier the same day of the exam **only** for those students will another assembly exam that day in a course with a higher number than ours. This does **NOT** include social events, club events, philanthropy events, etc. It is your responsibility to identify yourself as needing this accommodation *at least one full week* before the exam. If you do not, you may not be allowed to take an earlier exam.

HONOR SYSTEM: All exams are given under the Honor System. Any student caught cheating will receive a Failing grade in the course. Check the website for the UF policy on academic honesty: http://www.dso.ufl.edu/judicial/academic.php .

SCORING: Your grade for the term will be determined as follows:

Progress Exams (best 3 out of 4 @ 200 points each)	600 points
Mastering Chemistry Homework (MC points/340 *100)	100 points
Worksheets (15 out of 15 @ 2 points each)	30 points
Clicker Quizzes (2 correct, 0.5 wrong, max; total percentage of clicker points earned*70 class points)	70 points
Final Exam (cumulative)	200 points
TOTAL	1000 points

GRADING: Grades will not be curved. The following grade cutoffs will be used: This is fixed; points **will not** go up.

A = 870	B^- = 740	D^+ = 600
A^- = 840	C^+ = 700	D = 560
B^+ = 800	C = 670	D^- = 540
B = 770	C^- = 640	E = <540

Additional information on current UF grading policies for assigning grade points, https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx.

HELP: As soon as you encounter difficulties, get help! Small problems rapidly become big problems. You have several options available for assistance in this class. The first option is the office hours of your instructors, noted on the first page of the syllabus. Make use of them! The second option is the Chemistry Learning Center (CLC), located in Flint Hall, rooms 257-258. The CLC is staffed by chemistry graduate students who offer free help from periods 2-9, Monday through Friday. Finally, your classmates are also a valuable resource - study with your group!

CHEMISTRY LEARNING CENTER (CLC): There is free help to be had from graduate student teaching assistants in the CLC Monday through Friday in Flint Hall 257-258. Your instructor will have office hours in the CLC, but you may go there anytime and see any TA to get help on questions pertaining to chemistry. A schedule of the TA schedules will be posted in the corridor outside the CLC.

COUNSELING INFORMATION:
Counseling: http://www.chem.ufl.edu/~itl/counseling.html

DISABILITY RESOURCES:
Disabilities: http://www.chem.ufl.edu/~itl/disabilities.html
Disability resources students *must see us the first week of class*. Students requesting classroom and exam accommodations must first register with the Dean of Students Office. The Dean of Students Office will

provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation.

The Dean of Students Office provides individualized assistance for students with documented disabilities. Services are based upon student need and impact of their specific disability. There is no requirement for any student to self-identify as having a disability. However, students requesting classroom accommodations must register with the Dean of Students Office and provide the appropriate documentation verifying their disability. The Dean of Students Office determines what is and is not appropriate documentation. Examples of accommodations that are available to students include, but are not limited to, registration assistance, approval of reduced course load, course substitutions, classroom and examination accommodations, auxiliary learning aids, additional course drops when disability related, and assistance in other university activities. The designated coordinator for compliance with Section 504 of the Rehabilitation Act of 1973, as amended, and the Americans with Disabilities Act (ADA) is the Assistant Dean of Students responsible for Students with Disabilities Programs, P202 Peabody Hall, 392-1261 (Voice), or 392-3008 (TDD).

The Disability Resource Center strives to provide quality services to students with physical, learning, sensory or psychological disabilities, to educate them about their legal rights and responsibilities so that they can make informed decisions, and to foster a sense of empowerment so that they can engage in critical thinking and self-determination.

Lecture Schedule**

Date	Lecture	Chapter in Tro	Topic and Comments
23 Aug.	0	None	Syllabus and Introduction
25 Aug.	1	1.1 – 1.5	Matter, Physical and Chemical Properties
26 Aug.			Clicker registration deadline (in Sakai)
30 Aug.	2	1.6 – 1.8	Units, Solving problems (Needs a math review at this point) Add volume conversions
1 Sept.	3	2.1 – 2.6	Structure of the Atom; electrons, protons, neutrons
1 Sept.			MC Deadline: Introduction, Math Review
6 Sept.	4	2.7 – 2.8	Atomic Mass, Periodic Table
6 Sept.			MC Deadline: Ch 1
8 Sept.	5	3.1 – 3.6	Nomenclature Part 1
11 Sept.			MC Deadline: Ch 2
13 Sept.	-	Review	Finish incomplete lectures and exam review
13 September		EXAM 1	Covers Lectures 0 - 5
15 Sept.	6	3.1 – 3.6	Nomenclature Part 2
20 Sept.	7	3.7 – 3.8	Mole Concept Composition of Compounds
22 Sept.	8	3.9	Molecular and Empirical Formulas
27 Sept.	9	3.10 – 3.11	Balancing Equations Organic compounds
29 Sept.	10	4.1 – 4.3	Mass Relationships, Limiting Reactants
4 Oct.	11	4.4 – 4.8	Composition of Solutions, Reaction Types, Net Ionic Equations, Titrations
4 Oct.			MC Deadline: Ch 3
6 Oct.	-	Review	Finish incomplete lectures and exam review
6 October		EXAM 2	Covers Lectures 1 - 11
11 Oct.	12	4.4 – 4.8	Composition of Solutions, Reaction Types, Net Ionic Equations, Titrations
13 Oct.	13	6.1 – 6.3	First law heat and work
18 Oct.	14	6.4 – 6.6	Calorimetry, constant volume/pressure
18 Oct.			MC Deadline: Ch 4
20 Oct.	15	6.7 – 6.9	Hess's Law, Enthalpies of reaction
25 Oct.	16	6.1 – 6.9	Chapter 6
27 Oct.	17	9.1 – 9.3	Bonding Models, Types of Bonds, and Valence Electrons
27 Oct.			MC Deadline: Ch 6
1 Nov.	-	Review	Finish incomplete lectures and exam review
1 November		EXAM 3	Covers Lectures 1 – 17
3 Nov.	18	9.4	Lattice Energies
8 Nov.	19	9.5 – 9.6	Covalent Bonding
10 Nov.	20	9.7 – 9.9	Resonance and Formal Charge Exceptions to the Octet Rule
15 Nov.	21	9.10 – 9.11	Bond Energies
17 Nov.	22	10.1-10.2	Lewis Structures I
22 Nov.	23	10.3-10.4	Lewis Structures II
24 November		NO CLASS	Thanksgiving
27 Nov.			MC Deadline: Ch 9

29 Nov.	-	Review	Finish incomplete lectures and exam review
29 November		EXAM 4	Covers Lectures 1 – 22
1 Dec.	24	10.5	Molecular Polarity
6 Dec.	-	Review	Final Exam Review
8 Dec.			MC Deadline: Ch 10
8 December		NO CLASS	Reading Day
12 December Monday	12:30-2:30 PM	FINAL EXAM	Covers Lectures 1 - 24

****This is a tentative schedule. Class time will be used in its entirety to cover material through clicker questions and notes. If we finish a section early, the next section will be started, sometimes ahead of the schedule listed here. Always be prepared to begin the next day's sections.**

Mastering Chemistry Homework:

No extensions will be given! Do not get caught in a last minute rush and then experience a problem or outage. Note that over 35 hours of eHW are assigned during the semester.

Assignments for Course: CHM 1025	
Assignment Title	**Approximate time to complete assignments**
Introduction to MasteringChemistry	0.5 h
Assignment # 1 Chapter 1 Matter	6.7 h
Assignment # 2 Chapter 2 Atoms Ions and the Periodic Table	3.6 h
Assignment #3 Chapter 3 Chemical Compounds	1.9 h
Assignment # 4 Chapter 4 Chemical Composition	7.9 h
Assignment # 5 Chapter 6 Thermochemistry	5.6 h
Assignment #6 Chapter 9 Chemical Bonding I: Lewis Theory	8.2 h
Assignment #7 Chapter 10 Chemical Bonding II	1.0 h Total is about 35 hours of eHW