

**CHEM 1311.002 - General Chemistry I Syllabus**  
**TR, 8:00-9:15 am, Ratliff Building North (RBN) 3035**  
**Fall 2009**

**Instructor**

Dr. Jason Smee ([jsmee@uttyler.edu](mailto:jsmee@uttyler.edu))

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Office hours: MWF 9:30–10:30am, TR 1-2 pm, by appointment (phone, email, etc), or stop by my office.

**SI Leader**

Khady Camara

**Introduction/Course Description**

General Chemistry I will provide you with an understanding of the underlying principles of chemistry including the composition, structure, properties, and reactivity of matter. Topics will include physical and electronic properties of atoms, chemical formulas and reactions, periodic trends and the basic principles of chemical bonds (Chapters 1–10 in the textbook). Good study habits will be *essential* to your success. You will have to employ logic and critical thinking in order to solve a wide variety of both problems. You will have several resources available to you including Supplemental Instruction (SI), departmental tutors, and review sessions held by me before each exam. Of course, I am always glad to help you outside of class.

**Student Learning Outcomes**

By the end of the course, you should be able to

- 1) define the different classes of matter, compounds, and chemical reactions,
- 2) solve quantities based on chemical equations
- 3) describe the electronic structure of atoms
- 4) predict periodic trends of the elements
- 5) explain the bonding and shape of simple molecules or ions, and
- 6) use original thinking and logic to solve problems.
- 7) demonstrate knowledge of the interdependence of science and technology and their influence on, and contribution to, modern culture

*Your performance will be assessed through homework assignments and exams (see Homework and Exams sections below for more details).*

**Required and Recommended Materials**

- 1) The required text for this course is *Chemistry: The Central Science* (11<sup>th</sup> Edition) by Brown, Lemay, and Bursten with the *Mastering General Chemistry* online supplement. You must have this supplement to complete your homework assignments (the access code is good for 24 months and cannot be transferred). Hardcover textbook **with** *Mastering General Chemistry* **and** ebook, ISBN-13: 9780135031483. *Warning: Access codes obtained from used textbooks may not be valid.*
- 2) A scientific calculator (capable of logarithms and exponents) is also required.
- 3) The *Solutions to Red Exercises*, ISBN-13: 9780136002871 and the *Student's Guide*, ISBN-13: 9780136002642 are helpful, but not required.

**Important Dates:**

**Tentative regular exam dates: Sept 29<sup>th</sup>, Oct 27<sup>th</sup>, and Dec 10<sup>th</sup>**

September 7 Labor Day holiday – no classes held

**September 9 – census date – last day to file for grade replacement**

October 15 (Thursday) – Priority deadline for May 2010 graduation

**Friday, October 30 – Last day to drop or withdraw from courses**

November 25-27 (Wednesday through Friday) Thanksgiving holiday – no classes

**December 15 (Tuesday) Final Exam from 8:00 am - 10:00 am**

**Regular classroom attendance:**

Please come every day. The class meets each Tuesday and Thursday this semester (except during the Thanksgiving holiday, Thursday, Nov. 27). If you cannot attend, **all lecture material and homework assignments are your responsibility**. I will take attendance, but it will not be a direct component of your grade. See the second bulleted item under the grading section for additional details.

**Course Requirements**

- High school algebra II or MATH 1314. High school chemistry is also strongly recommended. If you have not had chemistry before, you will need to devote extra study time in order to keep up.
- Studying outside the classroom is mandatory! Chemistry can be difficult and requires a lot of review and practice. The topics covered in this course will build upon previous knowledge, so not keeping up with and understanding the material is a recipe for failure. If you feel that you are falling behind, please come and see me as soon as possible. I want to help you succeed, but I can't help if you don't ask.
- Students are strongly encouraged to form cooperative learning groups of students. The purpose of these groups are to help each other learn and to encourage each other. One of the hallmarks of UT Tyler is the excellent quality of its students. Students should share their talents and take advantage of the rich talents of others surrounding them.
- General Chemistry I Lab (CHEM 1111) is a separate course; however, it should be taken concurrently with the lecture. In order to fulfill your degree requirements **you must have taken both lecture and lab**.
- To receive a passing grade for the course, **you must take the final exam**; otherwise, you will fail the course regardless of your other exam and homework scores!
- The **last day to withdraw from the course with a "W"** is **Friday, October 30<sup>th</sup>**. It is *your* responsibility to withdraw from the course; otherwise, if you stop coming to class, you will receive an F!
- If withdrawing from this course, you are encouraged, but not required, to withdraw from the lab (CHEM 1111) and vice versa.

**Online Content: Blackboard**

- On-line content for this course will be on UT Tyler's Blackboard server. Helpful and important course information such as lecture notes, exam date reminders, and homework due dates will be posted here.
- Each chapter's lecture notes will be posted under "Lecture Notes" prior to covering the material in class. You may want to print these notes and bring them to class. *Remember, this material is a supplement to the lecture; it does not replace it!*

**To log on to Blackboard do the following:**

1. Go to [ccs.uttyler.edu/blackboard](https://ccs.uttyler.edu/blackboard) or follow the "Blackboard Log-in Link" at the bottom of the UT Tyler home page ([www.uttyler.edu](https://www.uttyler.edu)).
2. Click the "Login" button and enter your "Username" and "Password". For help with your username and password, see the Student FAQ on the main Blackboard page.
3. You will see a list of all of the Blackboard courses for which you are enrolled. You are automatically enrolled in all of the Blackboard classes for which you are registered. You do not need to enroll yourself in any courses. Note: not all of your instructors may actually use the Blackboard course, but the course will still appear on your home page.

### Homework (and Mastering Chemistry)

- Homework will regularly be assigned for you to complete outside of the lecture class time. All of these assignments will be posted on the Blackboard website under “Announcements”.
- Such assignments will include reading material from the text as well as the online homework. It is very important that you complete such assignments in a timely manner.
- The online homework will count for 25% of your grade. (**Some** extra credit is available).
- *All online homework problems accessed through the Mastering General Chemistry website, count as part of your course grade.* The web site for the online homework system is [www.masteringchemistry.com](http://www.masteringchemistry.com).

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To access the online homework go to [www.masteringchemistry.com](http://www.masteringchemistry.com) and click on the Brown/Lemay/Bursten’s text to enter the on-line homework system. Complete the following:

- A. If you have used the online homework before you can continue to access the site using your same login and password so long as it has not been more than 18 months since you first activated your account. Follow the instructions on the site if you have forgotten your login credentials.
- B. If you have not used the online homework at UT Tyler, you will have to register as a first time user by leaving “No, I am a New User” selected and then type in the Access Code that you have purchased. **MAKE SURE TO INPUT YOUR NAME AS REGISTERED AT UT TYLER WHEN YOU SET UP YOUR NEW USER ACCOUNT.**

After receiving access to the on-line homework system, enroll in the course using the ID below.

- A. MasteringGeneralChemistry Course ID = **SMEEFALL2009**
  - B. Student ID = anything you want (although your UT Tyler ID is preferred)
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### Exams

- The *regular exam* dates listed above are tentative (the final exam date/time are fixed and non-negotiable). At least one week’s notice will be given prior to the exam. Exams will be in a multiple-choice format and will cover the material discussed in lecture AND from assigned reading in the text. *Assigned reading material is subject to examination even if it has not been discussed during lecture!*
- You are required to bring a pencil and a scientific calculator. *You cannot take an exam without these materials.* **One** 3½” × 5” note card (no larger!) can be used on each exam. No other materials are permitted!
- The exams will start promptly at 8:00 am and you must finish your exam no later than 9:15 am. You may keep the exam, but you must turn in the scantron sheet. I recommend recording your answers on the exam so you can ask questions later. After the exams have been graded, you may pick up your scantrons in my office.
- The final examination will be given on (and only on) **Tuesday, December 15, from 8:00 am – 10:00 am**. You are required to take the final examination in order to receive a passing grade in the course. There will be no make-up of the final exam, no exceptions!
- The final examination is the American Chemical Society Cooperative Examination for General Chemistry First Term (nationally standardized).

- Missed exams will be handled according to one of the two following methods:
  1. If you know that you will miss an exam due to an excused absence, then you can take the exam early. To do so you must give me at least one-week notice. **You will not be allowed to take the exam after the scheduled exam date, so, plan ahead if you know you will be absent.**
  2. For any unplanned absence, such as illness, car-trouble, funeral, etc. the final exam will replace the exam you missed. **No exams will be given after the scheduled dates.**
- Missing a second exam will require a special meeting between with me to determine the appropriate action. Such an action may include, but is not limited to withdrawal from the course. If you have any questions regarding my makeup policy, please do not hesitate to ask me.
- I will be fair and careful in the grading of exams and homework, but errors are possible. If you think that I made a grading error, please see me within one week after taking the exam. *All* scores will be considered final one week after the grades have been posted on Blackboard!

### Grading

- Grades will tentatively be based on a 90/80/70/60 scale, but may be adjusted based upon my evaluation of the overall class performance. Attendance, class participation, and initiative will be considered for borderline grades. SI sessions will be conducted during the semester and I will be available during my office hours (feel free to stop at other times; I have an open door policy). ***Do not*** wait until the last minute before an exam to seek assistance. Grades will be posted on Blackboard. The grades will be weighted as follows:

3 exams	50 % (16.6 % for each exam)
Homework	25 % (only cumulative homework scores will be posted on Blackboard)
<u>Final Exam</u>	<u>25 %</u>
<b>Total</b>	<b>100 %</b>

- If you have *four or fewer unexcused absences*, I will **replace** your lowest exam score with your final exam score ***if*** your final exam score is higher. (If the final exam score is the lowest score, then no grade will be replaced.) Only one score can be replaced and homework grades will not be replaced (however, there will be extra credit opportunities on the homework). As an example, if your exam scores are 60, 75, and 85 with a 70 on the final, your final grade would be calculated based on your overall homework score and the scores 70, 75, 85 and 70 in which the first exam score of 60 was replaced with the 70.

### Course Outline

- Introduction: Matter and Measurement Chapter 1
- Atoms, Molecules, and Ions Chapter 2
- Stoichiometry: Calculations with Chemical Formulas and Equations Chapter 3
- Aqueous Reactions and Solution Stoichiometry Chapter 4
- Thermochemistry Chapter 5
- Electronic Structure of Atoms Chapter 6
- Periodic Properties of the Elements Chapter 7
- Basic Concepts of Chemical Bonding Chapter 8
- Molecular Geometry and Bonding Theories Chapter 9
- Gases Chapter 10

## **University Policies**

### **Students Rights and Responsibilities**

To know and understand the policies that affect your rights and responsibilities as a student at UT Tyler, please follow this link: <http://www.uttyler.edu/wellness/StudentRightsandResponsibilities.html>

### **Grade Replacement/Forgiveness**

If you are repeating this course for a grade replacement, you must file an intent to receive grade forgiveness with the registrar by the 12th day of class. Failure to do so will result in both the original and repeated grade being used to calculate your overall grade point average. Undergraduates will receive grade forgiveness (grade replacement) for only three course repeats; graduates, for two course repeats during his/her career at UT Tyler.

### **State-Mandated Course Drop Policy**

Texas law prohibits a student who began college for the first time in Fall 2007 or thereafter from dropping more than six courses during their entire undergraduate career. This includes courses dropped at another 2-year or 4-year Texas public college or university. For purposes of this rule, a dropped course is any course that is dropped after the 12th day of class (See Schedule of Classes for the specific date). Exceptions to the 6-drop rule include, but are not limited to, the following: totally withdrawing from the university; being administratively dropped from a course; dropping a course for a personal emergency; dropping a course for documented change of work schedule; or dropping a course for active duty service with the U.S. armed forces or Texas National Guard. Petitions for exemptions must be submitted to the Registrar's Office and must be accompanied by documentation of the extenuating circumstance. Please contact the Registrar's Office if you have any questions.

### **Disability Services**

In accordance with federal law, a student requesting accommodation must provide documentation of his/her disability to the Disability Support Services counselor. If you have a disability, including a learning disability, for which you request an accommodation, please contact Ida MacDonald in the Disability Support Services office in UC 282, or call (903) 566-7079.

### **Student Absence due to Religious Observance**

Students who anticipate being absent from class due to a religious observance are requested to inform the instructor of such absences by the second class meeting of the semester.

### **Student Absence for University-Sponsored Events and Activities**

If you intend to be absent for a university-sponsored event or activity, you (or the event sponsor) must notify the instructor at least two weeks prior to the date of the planned absence. At that time the instructor will set a date and time when make-up assignments will be completed.

### **Social Security and FERPA Statement:**

It is the policy of The University of Texas at Tyler to protect the confidential nature of social security numbers. The University has changed its computer programming so that all students have an identification number. The electronic transmission of grades (e.g., via e-mail) risks violation of the Family Educational Rights and Privacy Act; grades will not be transmitted electronically.