

TSUM  
Fall Semester 2004  
Survey of Chemistry  
CHM 1115

**Title of Course:** Survey of Chemistry

**Instructor:** Dr. John Griggs  
(W) 270-3450  
(H) 271-3594

**Text:** *Chemistry, An Introduction to General, Organic and Biological Chemistry, Eighth Edition, Karen C. Timberlake*

**General Course Objectives and Prerequisite:** This course presents an overview of some of the basic concepts and principles of general chemistry including the structure of matter, the nature of chemical bonding, acid/base chemistry and the interactions of energy and matter along with a brief introduction to some central concepts of organic chemistry and biochemistry. The concepts and principles of chemistry covered are illustrated with real world examples including those from the health-related fields. There are no prerequisites for the course.

**Course Content:** The following chapters from the *Chemistry, An Introduction to General, Organic and Biological Chemistry, Eighth Edition, Karen C. Timberlake* will be covered during the course: 1, 2, 4, 5, 6, 8, 9, 10, 14, 15, 16

**Meeting Times:** Tuesday, Thursday 5:30 - 7:50 pm

**Method of Teaching:** Lecture, assigned reading, topic paper and homework.

<b><u>Method of Course Evaluation:</u></b>	Two tests	50%
	Comprehensive Final	30%
	Topic Paper	10%
	Quizzes	10%

<b><u>Schedule of Tests:</u></b>	Test 1	- September 14
	Test 2	- October 5
	Final Exam	- October 12

<b><u>Grade Scale:</u></b>	100-90 A	69-60	D	
	89-80	B	59-0	F
	79-70	C		

**Topic Paper:** A topic paper will be required of each student. Topics will be assigned during the first week of the semester. The primary reference will be the course text book. Requirements for the topic paper are outlined on a separate hand-out which will be distributed during the first

week of the semester. Topic papers are due on or before **October 5**. I will not accept topic papers after October 5 and students that have not turned in a topic paper by October 5 will receive a 0 for their topic paper grade.

**Quizzes:** There will be approximately 6 to 8 announced quizzes during the semester. The quizzes will be on homework problems discussed at the previous class meeting.

**Class Attendance:** All students are expected to attend class regularly. TSUM does however realize that on occasion students may have to miss class due to personal reasons; but since regular class attendance has a positive effect on a student's performance every effort should be made to limit absences. More than four absences (excused or unexcused) will result in the filing of an Excessive Absence Form with the Student Affairs Office.

**Make-up Tests:** Students should make every possible effort to take tests as scheduled. Students are required to contact the instructor prior to the test date if they are not going to be in attendance for the test. A make-up test will be administered in the Learning Resource Center for those students with an excused absence. Students with an unexcused absence will receive a 0 for their test score.

**Contacting the Instructor:** I can be contacted during the week from 8:30 am to 5:15 pm at my work number, and from 6:00 pm to 9:00 pm at my home number. During the weekend I can be contacted at my home number. I strongly encourage students to call me with their questions.

**Students with Disabilities:** Students meeting the American with Disabilities Act criteria must contact Sandra Gouge (241-9532) room 431, Whitley Hall for information regarding documentation of disability and with requests for special service and accommodations.

**Learning Resource Center (LRC) Information:** For students who must make up exams or receive assistance from tutors, the LRC is located on the 5<sup>th</sup> floor of Whitley Hall. Call in advance for hours of operation at 241-9530.

**Academic Honesty:** All students should read the *Standards of Conduct* section of the TSUM Undergraduate Bulletin which includes a discussion of the Academic Code and the penalties for misconduct.

**Special Requirements:** Students should turn their cell phones off or at a minimum set them to "vibrate mode" during class. Only individuals registered for the course are allowed to attend lecture.

**General Chemistry  
Survey of Chemistry**

<b><u>Date</u></b>	<b><u>Material Covered</u></b>
8/24/04	Chapter 1, <i>Measurements</i> - Chapter 2, <i>Atoms and Elements</i>
8/26/04	Chapter 2 (cont'd), <i>Atoms and Elements</i>
8/31/04	Chapter 4, <i>Compounds and Their Bonds</i>
9/02/04	Chapter 4 (cont'd), <i>Compounds and Their Bonds</i>
9/07/04	Chapter 5, <i>Chemical Reactions and Quantities</i>
9/09/04	Chapter 6, <i>Energy and Matter</i>
9/14/04	<b>Test 1</b> (Chapters 1, 2, 4, 5, 6)
9/16/04	Chapter 8, <i>Solutions</i>
9/21/04	Chapter 9, <i>Acids and Bases</i>
9/23/04	Chapter 10, <i>Introduction to Organic Chemistry</i>
9/28/04	Chapter 14, <i>Carbohydrates</i>
9/30/04	Chapter 15, <i>Lipids</i>
10/05/04	<b>Test 2</b> (Chapters 8, 9, 10, 14, 15)
10/07/04	Chapter 16, <i>Amino Acids, Proteins and Enzymes</i>
10/12/04	<b>Final Exam</b> (Comprehensive-Chapters 1, 2, 4, 5, 6, 8, 9, 10, 14, 15, 16)

TSUM  
Fall Session (A Term) 2004  
Survey of Chemistry Lab CHML 115

**Title of Course:** Survey of Chemistry Lab

**Instructor:** Dr. John Griggs  
(W) 270-3450  
(H) 271-3594

**Text:** *Laboratory Manual, Chemistry, An Introduction to General, Organic and Biological Chemistry*, Karen C. Timberlake

**General Course Description/Objectives/Prerequisite:**

This is the laboratory portion of Survey of Chemistry CHM 1115. Students will perform basic experiments which illustrate key concepts in chemistry which have been discussed in lecture. At the beginning of each lab session students will receive detailed instructions concerning the experiment. There are no prerequisites for the course.

**Meeting Times:** Thursday 8:05 - 10:25pm (see attached lab schedule)

**Meeting Location:** Room 209, Bartlett Hall

**Method of Lab Evaluation:**

Each student will be required to prepare a lab report for each experiment completed. The format and content of the lab report for an experiment will be discussed at the beginning of each lab session. The lab reports may be handwritten or typed but they must be neat and legible. Completed lab reports are due at the next lab session (one week after the lab was performed). Five points will be deducted for each day a lab report is late. A lab exam on the terms, concepts and techniques covered in lab will be administered on **October 7**. Your grade will be based on the lab reports and lab exam as noted below.

- Lab Reports 60%
- Lab Exam 40%

**Grade Scale:** 100 - 90 A 69 - 60 D  
89 - 80 B 59 - 0 F  
79 - 70 C

**Class Attendance/Make-up Labs:** All students are expected to attend each lab session. Students are required to contact the instructor **prior** to the lab session if they are not going to be

in attendance. Students that miss a lab with an excused absence will be required to submit an additional topic paper (see hand-out on topic papers). Students with an unexcused absence will receive a 0 for the lab session.

**Lab Exam:** October 7

**Contacting the Instructor:** I can be contacted during the week from 8:30am to 5:15pm at my work number and from 6:00pm to 9:00pm at my home number. During the weekends I can be contacted at my home number. I strongly encourage students to call me with their questions.

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**Special Requirement:** Students should turn their cell phones off or at a minimum set them to “vibrate mode” during lab. Only individuals registered for lab are allowed to attend the lab sessions.

**Survey of Chemistry Lab  
Fall Semester 2004**

<b><u>Date</u></b>	<b><u>Topic</u></b>
8/26/04	Lab Orientation / Significant Digits / Measurement Theory
9/02/04	Density Experiment
9/09/04	Heat of a Reaction Experiment
9/16/04	Radiation Experiment
9/23/04	Acid/Base Titration Experiment
9/30/04	Avogadro's Number Experiment
10/07/04	Lab Exam