### CHM135:

# Introduction to Inorganic and Environmental Chemistry

# Sam Houston State University

Instructor:	Dr. Benny E. Arney	Semester:	Summer Session I, 2008
Course Credit	3 Semester Hours	Room & Time	CFS 103 at 8:00-9:50 AM
Office Phone:	294-1531 off-camp ext. 41531 on-camp	Email:	chm_bea@SHSU.EDU
Office:	CFS <u><b>326</b></u> , 302, 323, or 305	Office Hours:	MTuWTh: 1:00-3:00 PM

#### **Textbook**

Karen C. Timberlake, "General, Organic, and Biological CHEMISTRY: Structures of Life", 2<sup>nd</sup> Ed., Pearson, Benjamin Cummings, 2007

### **Description**

This course will examine general concepts of chemistry and chemical terminology. We will explore the use and application of many of these concepts in various parts of nature and modern technology. We will examine the structure, properties, reactions of various materials and the places in our lives that these materials occupy. Additionally, the concepts of what is science and what is not will be touched on periodically.

### **Required Materials**

- a. Bring your textbook to class every day.
- b. Bring your up-to-date homework to class every day.

### Homework:

Homework problems are necessary to learn to apply the material and concepts discussed in the reading and the class. You are expected to work the problems assigned for each chapters and to keep the homework in a designated notebook or binder. It will not be graded, but will be used to decide on border-line grades at the end of the semester. However, the practice of doing the problems will contribute to better performance on tests. The problems for homework are very much like those which might appear on the tests.

Remember that it is the understanding and set up of the homework that is most important and not the final answer.

#### **Objectives**

- **1.** Provide a survey of General Chemistry necessary for students in health-related career programs, nutrition/home economics majors, and agriculture majors.
- 2. Give Non-Science majors basic knowledge of General Chemistry to assist them in

understanding issues and information related to chemicals, metabolism, health, nutrition, and drugs.

- **3.** Provide information and background in General Chemistry assist the Non-Science major in understanding news and articles concerning scientific issues.
- **4.** To satisfy part of the 8 hr Lab Science Core requirement for all SHSU graduates.

### **Study Techniques**

Before each class meeting, it will be essential for you to complete the assigned reading and any assigned homework so that lectures might be supplemented with appropriate questions and valuable discussion. It is important to realize that just reading the material will not be sufficient. You should outline important concepts and terms as you progress though the material and make note of those points which give you trouble. If you are having difficulty with any of the assignments, it is your responsibility to ask questionw make regular visits to my office and/or the chemistry tutors.

### **Attendance Policy**

It will be essential for you to attend class regularly. Attendance will not be used for grading, but it is difficult to know what is important for tests and understanding if one is not present.

# Examinations (SCANTRONS ARE REQUIRED FOR EACH EXAM AND THE FINAL, CALCULATORS ARE NOT ALLOWED ON EXAMS)

There will be three in-class, closed-book examinations each worth 100 points. If an exam has been missed due to absence, it will be the replaced by half of the grade earned on the final. If more than one exam is missed, the additional missed exam will be replaced by a zero (0).

A final, **comprehensive** examination will be given at the University scheduled time. This will also be worth 200 points. All students must complete this exam (the score obtained can not be dropped). Therefore, the total number of exam points possible is 500. Failure to take the final will result in an "F" for the course.

#### The Grade

A final letter grade will be assigned based on your total accumulated points (Exams & Final): Until all tests and the final are completed, you do not have a "Grade", just points.

4 (A)	425 - 500
3 (B)	375 – 424
2 (C)	325 - 374
1 (D)	275 - 324
0 (F)	274 or below

# **Make-up Tests:**

There are none. Do not ask about them.

# **Grade Information:**

Information about your grades is only available by receiving it from the prof in person or on your graded work or via BlackBoard. Do not phone or email about your grades.

### **Schedule for Lectures**

Date	Topic	Reading Assignment	Homework Asignment
June 3	Introduction, Class Policies, Science, Measurements	Chapter 1	1.79-1.121
June 4			
5	Atoms and Elements	Chapter 2	2.83-2.119
6	Exam 1: Last day to drop w/o Q		
9	Nuclear Chemistry	Chapter 3	3.45-3.80
10			
11	Compounds and their Bonds	Chapter 4	4.79-4.115
12			
13	Exam 2: Chemical reactions and Quantities	Chapter 5	5.69-5.105
16			
17	Energy and Matter	Chapter 6	6.49-6.80
18			
19	Gases	Chapter 7	7.65-7.95

20	Exam 3		
23	Solutions	Chapter 8	8.73-8.123
24			
25	Chemical Equilibrium	Chapter 9	9.33-9.60
26			
27	Acids and Bases	Chapter 10	10.71-10.104
30			
July 1	Final Examination		

### **Homework Problems**

You must work out the solutions to assigned exercises and understand the concepts being addressed by each in order to pass this course. You may wish to try additional exercises after finishing those assigned in order to fully test your comprehension of the material.

### Do you want to do well in this course?

If your answer to this question is yes, you should frequently ask yourself the following questions:

- 1. Have I prepared for class by completing the assigned reading before coming to lecture?
- 2. Have I made notes during my reading of the points which are confusing or difficult so that I may ask questions about them during lecture?
- 3. Have I kept a neat and complete notebook of homework problems and sought help from a tutor or faculty member for those problems I did not fully understand?
- 4. Have I prepared for the exams by working on assignments daily and not waiting until two or three days before the exam?

### Cell Phones and Electronic devices must be turned off and

**put away during class**. If your cell goes off in class, you <u>will</u> be ejected from the classroom. No ear mounted phones or ear phones (I-pods) are allowed in class. **During tests you are not allowed to have a cell phone at your desk**. You will be ejected from the test if you have one in your possession or if your cell-phone goes off.

# **Study Requirements:**

Most of the important learning in this class will be <u>SELF-LEARNING or SELF-TEACHING</u>. To discuss all of the necessary important topics in class would leave no time for questions or discussion and not enough material could be covered to justify the class. In order to be effective in this class you must prepare by reading and working problems prior to coming to class. Class time is best used to work on applying the readings and material. <u>Attending class and writing notes will NOT be enough for most students to pass the class</u>. Each student must find the level of interaction with the material necessary to succeed. Study groups may be excellent methods for many students. Remember you are responsible for your advancement.

## **Questions in Class:**

If you ask a question in class, I generally will not answer it directly if it is one that requires applying concepts, but will ask you questions to find the source of the question. Most questions arise because of inadequate background or misunderstanding of a prior concept or material. Just providing you an answer to write in your notebook would not solve the problem.

If I ask a question in class, especially one that should be easily answered if a student is keeping up and understanding the material, I will wait for the class to come up with an acceptable answer. You should not consider this class a spectator class where you show up take notes and then study before the test.

# **ADA Policy:**

SHSU adheres to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations for students with disabilities. If you have a disability that may affect adversely your work in this class, then I encourage you to register with the SHSU Counseling Center and to talk with me about how I can best help you. All disclosures of disabilities will be kept strictly confidential. NOTE: no accommodation can be made until you register with the Counseling Center.

# **Academic Dishonesty (Cheating) Policy:**

"All students are expected to engage in al academic pursuits in a manner that is above reproach. Students are expected to maintain complete honesty and integrity in academic experiences both in and out of the classroom. Any student found guilty of dishonesty in any phase of academic work will be subject to disciplinary action. The University and its official representatives may initiate disciplinary proceedings against a student accused of any form of academic dishonesty including, but not limited to, cheating on an examination or other academic

# **Inappropriate Classroom Conduct Policy:**

"Students will refrain from behavior in the classroom that intentionally or unintentionally disrupts the learning process and, thus, impedes the mission of the university. Cellular telephones and pagers must be turned off before class begins. Students are prohibited from eating in class, using tobacco products, making offensive remarks, reading newspapers, sleeping, talking at inappropriate times, wearing inappropriate clothing, or engaging in any form of distraction. Inappropriate behavior in the classroom shall result in a directive to leave class. Students who are especially disruptive also may be reported to the Dean of Students for disciplinary action in accordance with university policy."

### **Visitors to the Classroom:**

"Unannounced visitors to the class must present a current, official SHSU identification card to be admitted in the classroom. They must not present a disruption to the class by their attendance. If he visitor is not a registered student, it is at he instructor's discretion whether or not the visitor will be allowed to remain in the room."

Student Acknow	ledgement of Syllabus:
Ι,	(your name) having
SHSU ID#	, have printed the syllabus for CHM 135 (SummerSession
	edge that I have read said syllabus and that I am familiar with its
and requirements and tha	e that my continuance in this course requires that I agree to its content t changes to this syllabus are only possible if they further the aims of propriate by the professor.
instructor. If these proble	tions and/or problems with the course must be addressed to the ems are not part of the day's scheduled material, it should be addressed hours, or by appointment.
Signed:	
Date:	