Brazosport College
Syllabus for CHEM 1405: Introductory Chemistry

Instructor: Dr. Judy Chu **Office: HS-212D**
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COURSE DESCRIPTION
A study of basic organic and inorganic chemistry with special emphasis placed on practical applications of chemistry. Designed for students with no previous background in chemistry. To pass the course, the student must successfully **complete** the **laboratory** portion with a grade of D or better. (4 SCH, 3 lecture, 2 lab)

PREREQUISITES
A background in elementary algebra may be helpful, but it is not required.

COURSE GOALS
At the completion of CHEM 1405 the student will be able to:

1. Use the periodic table to determine the chemical symbols of the elements, their electronic configurations, and to predict chemical formula.
2. Balance chemical equations.
3. Perform molar and mass quantity calculations given balanced chemical equations.
4. Use basic laboratory skills to carry out procedures in a laboratory, as indicated by the student's laboratory grade.

TEXTBOOK OR COURSE MATERIAL INFORMATION
1. Tro, Introductory Chemistry, 4th Ed., Custom Edition for Brazosport College, Published by Pearson, 2011.
2. Signature Labs Series: Introductory Chemistry/CHEM1405, Published by Cengage Learning.
3. Scientific Calculator.

LAB REQUIREMENTS
1. Visorgogs or safety goggles, must meet ANSI Z87.1-1989 certification.

STUDENTS WITH DISABILITIES
Brazosport College is committed to providing equal education opportunities to every student. Brazosport College offers services for individuals with special needs and capabilities including counseling, tutoring, equipment, and software to assist students with special needs. Please contact the Special Populations Counselor, 979-230-3236, for further information.

ACADEMIC HONESTY
Brazosport College assumes that students eligible to perform on the college level are familiar with the ordinary rules governing proper conduct including academic honesty. The principle of academic honesty is that all work presented by you is yours alone. Academic dishonesty including, but not limited to, cheating, plagiarism, and collusion shall be treated appropriately. Please refer to the

Brazosport College Student Guide for more information; this is available online at http://www.brazosport.edu/Web%20Part%20Pages/Sched.aspx.

ATTENDANCE AND WITHDRAWAL POLICIES

Class attendance is not graded, but you must attend class to successfully complete the course. If you are unable to complete this course, you must complete and submit a withdrawal form with the registrar. If you stop attending class and do not withdraw, you will receive a performance grade, usually an "F".

COURSE REQUIREMENTS AND GRADING POLICY

For this class you complete the following:

Exams: There will be a total of five exams. Each exam will last approximately one hour during class. The exact date of each Exam will be announced in class prior to the actual date of the exam.

Homework: Due date for homework is the day of the exam. For example, exam 1 covers chapters 1-3; therefore, the due date for chapters 1, 2, and 3 is the day of exam 1.

Lab: The laboratory portion of the course consists of weekly 2 hour labs which the student must attend. To pass the course, the student must successfully complete the laboratory experiments with a grade of D or better.

Final Exam: The final will be given at the end of the course. The final exam is comprehensive.

Each of the above requirements counts toward your final grade as follows:

Exams	50%
Homework	10%
Lab	20%
Final	20%

TESTING

See the class calendar for the chapters and dates of the tests. Students are allowed to bring one page of hand written notes, containing equations, etc., to the exams. The material to be covered on each exam is as follows:

Exam	Chapters
1	1 - 3
2	4, 9, 10 &12
3	5 &7
4	6 &8
5	13, 14, &11
Final	Comprehensive Exam (all chapters from Exams 1-5 and chapter 18)

MAKE-UP POLICY

There will be no make-up exams. The lowest exam grade will be dropped. The final exam grade will replace **one** missed exam grade.

STUDENT RESPONSIBILITIES

Students are expected to fully participate in this course. The following criteria are intended to assist you in being successful in this course:

1. understand the syllabus requirements
2. use appropriate time management skills
3. communicate with the instructor
4. complete course work on time, and
5. utilize online components (such as Desire2Learn) as required.

PROJECTS, ASSIGNMENTS, PORTFOLIOS, SERVICE LEARNING, INTERNSHIPS, ETC.

None.

OTHER STUDENT SERVICES INFORMATION

Information about the Library is available at www.brazosport.edu/sites/CurrentStudents/Library/default.aspx or by calling 979-230-3310.

Information about study skills and tutoring for math, reading, writing, biology, chemistry, and other subjects is available in the Learning Assistance Center (LAC); see www.brazosport.edu/sites/CurrentStudents/LAC/default.aspx or call 979-230-3253.

To contact the Physical Sciences and Process Technology Department call 979-230-3427.

The Student Services provides assistance in the following:

Counseling and Advising	979-230-3040
Financial Aid	979-230-3294
Student Activities	979-230-3355

To reach the Information Technology Department for computer, email, or other technical assistance call the Helpdesk at 979-230-3266.

CHEM 1405 – Spring 2012 Schedule*

Dr. J. Chu – Office: HS-212D, Phone: 230-3435, e-mail: judy.chu@brazosport.edu

WEEK	DATE	LECTURE MW 9AM-10:15AM	LAB
1	1/16	**MLK Holiday** Chapter 1 – The Chemical World Chapter 2 – Measurement and Problem Solving	**No Lab**
2	1/23	Chapter 2 – Measurement and Problem Solving Chapter 3 – Matter and Energy	Exp 486 – Dimensional Analysis
3	1/30	**Exam 1** Chapter 4 – Atoms and Elements	Tech 380 – Safety Practices
4	2/6	Chapter 4 – Atoms and Elements Chapter 9 – Electrons in Atoms and the Periodic Table	Exp. 382 - Transfer
5	2/13	Chapter 9 – Electrons in Atoms and the Periodic Table Chapter 10 – Chemical Bonding	Exp. 375 - Separation
6	2/20	**Exam 2** Chapters 5 – Molecules and Compounds	Exp. 375 - Separation (continued)
7	2/27	Chapters 5 – Molecules and Compounds Chapter 7 – Chemical Reactions	Exp. 399 - Chemical Change
8	3/5	Chapter 7 – Chemical Reactions Review for Exam 3	Exp. 405 - Identify
9	3/12	**Spring Break**	**No Lab**
10	3/19	**Exam 3** Chapter 6 – Chemical Composition	Exp. 387 - % Water
11	3/26	Chapter 6 – Chemical Composition Chapter 8 – Quantities in Chemical Reaction Drop deadline – Friday, March 30	Exp. 388 - Empirical Formula
12	4/2	Chapter 8 – Quantities in Chemical Reaction **Exam 4**	**Make-up Lab**
13	4/9	Chapters 13 – Solutions Chapter 14 – Acids and Bases	Exp. 394 - Molar Concentration
14	4/16	Chapter 14 – Acids and Bases Chapter 11 - Gases	Exp. 304 – Vinegar
15	4/23	Chapter 11 – Gases **Exam 5**	Clean-up
16	4/30	Chapter 18 – Organic Chemistry Review for the Final Exam	
		Final Exam – Friday, May 4, 8-10 AM	

*This schedule is subject to change.

Homework Assignment for CHEM 1405 – Tro

Chapter	End of Chapter Problems
2	29,67,69,73,79,83,93,95,104
3	65,67,68
4	29,31,43,45,47,55,91,94
9	49,55,63,77,83,95,100
10	25,39,43,51,53,67,88
5	33,41,49,51,61,69,71,74,81,83,92
7	25,35,39,65,68,75,83,93
6	29,45,49,63,83,87,99
8	25,29,35,41,45,61,66
13	43,51,61,63,65,67,83,85,87,90
14	43,45,53,55,59,65,73,75,85,110
11	25,55,57,63,65,81,83,89,92
18	43,45,87,89