Brazosport College

Syllabus for CHEM 1305 - Introductory Chemistry (Online)

Instructor: **Office:**
Office Phone: **Email:**
Alt. Phone:

I. COURSE DESCRIPTION

CHEM 1305 - Introductory Chemistry. CIP 40005015103
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.
Credit Hours: 3 (3 lecture, 0 lab)

A. Required skill level: College-level reading and writing. College-level with corequisite (placement code 3).

II. COURSE OBJECTIVES

This course is designed to help the student master the following:

A. Unit 1
   a. Learn the basic terms used to describe matter and energy.
   b. Understand the relationship of the masses of elements and compounds to the unit of measure, the mole.
   c. Understand the relationship of atomic structure to chemical properties.
   d. Predict the properties of element based on its position in the periodic table.

B. Unit 2
   a. Determine the names and formula of chemical compounds.
   b. Develop a good understanding for the relationship between percent by mass and the mole. Be able to convert from moles to grams and grams to moles.

C. Unit 3
   a. Write and balance chemical equations.
   b. Use the concept of stoichiometry to determine quantities of reactants needed and products formed in a chemical reaction.
   c. Identify the element oxidized, the element reduced and the oxidizing and reducing agents in a redox reaction.

D. Unit 4
   a. Obtain a basic understanding of the ideal gas law, i.e. the effect of pressure and temperature on volume.
   b. Understand the relationship between mass percent and molarity and how to convert from one to another. Also understand the dilution formula and how to use it.

E. Unit 5
   a. Distinguish between organic and inorganic compounds. Draw structural formulas and name the alkanes, alkenes and alkynes. Distinguish between saturated, unsaturated, and cyclic hydrocarbons.
   b. Discuss the general formula, names, structure and uses of alcohols, ethers, aldehydes, ketones, carboxylic acids and esters.
   c. Become familiar with monomers and polymers. Be exposed to polymer manufacturing and polymer evaluation technology.

III. STUDENT LEARNING OUTCOMES

At the completion of CHEM 1305 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.

IV. TEXTBOOK OR COURSE MATERIAL INFORMATION

A. Textbook

1. Introductory Chemistry: Atoms First Plus Mastering Chemistry w/Access Card, Russo & Silver, 5th Edition, 2016 Pearson Publisher. ISBN: 978-0321972194 (required)

2. Introductory Chemistry: Mastering Chemistry (loose leaf textbook) bundle, Russo & Silver, 5th Edition, 2015, Pearson Publisher. ISBN:978-0134086767 (optional)
3. Scientific Calculator: T130XA. (required)

Required course materials are available at the Brazosport College bookstore, on campus or online at http://brazosport.edu/bookstore/home.html Students are not under any obligation to purchase a textbook from the college bookstore. The same textbook is/may also be available from an independent retailer, including an online retailer.

For Distance Education Courses include the following: Contact the Brazosport College Bookstore with a credit card for course materials. Phone: 979-230-3651. Fax: 979-230-3653. Email: bookstore@brazosport.edu. Website: http://brazosport.edu/bookstore/home.html

Orientation Meeting: The orientation for Chemistry 1305.40 will be online at https://online.brazosport.edu/d2l/login All students are required to become familiar with the material in this web page.

Introduction:
CHEM 1305 - Introductory Chemistry, Internet Section, is offered as an online learning class using a combination of the internet and a textbook. Brazosport College is pleased to welcome to this course students from the Virtual College of Texas, as well as students from the Brazosport area. The online section of CHEM 1305 is designed to replace the traditional lecture section of CHEM 1305. To complete the course, you must also be enrolled in the lab section of the course, either CHEM 1105L.40, the internet lab section, which is a home-based lab, or the traditional CHEM 1105L, which is held on campus.

If you are a Brazosport College student, you have the option of choosing either the traditional lab section which meets on campus once a week, or the take-home lab section. For Virtual College students, you are automatically registered for the take-home lab. The take-home lab consists of a series of experiments to be performed each week using materials commonly found in your kitchen, bathroom, and other places around your home. You will perform an experiment, record observations, and then answer questions and draw conclusions based on your data.

VCT students – To pass the course, you must successfully complete the laboratory portion with a grade of D or better to receive 3 credit hours for CHEM 1305.

Connecting to the Internet Class:
Access the course by going to: https://online.brazosport.edu/d2l/login
Follow the instructions in Logging on to D2L-1305-1105-internet to login to the course in Desire2Learn.
For help with login to Desire2Learn, email your problems to helpdesk@brazosport.edu.

B. Course Outline

This is a sample outline which may vary with individual instructors. It will also vary based on whether the course is a summer course or a fall/spring course. Students should contact their instructor for the outline of the course they are taking.

Week	Date		Reading Assignments from Textbook	Homework Assignments*
1	8/26	Get Textbook from Bookstore; **Login to D2L**	**1** (What is Chemistry)	Mastering Chemistry
2	9/2		**2** (Numerical Side of Chemistry)	Mastering Chemistry
3	9/9		**3** (The Evolution of Atomic Theory)	Mastering Chemistry
4	9/16	**Exam 1**** (Chapters 1,2,3)	**4** (Modern Model of the Atom)	Mastering Chemistry
5	9/23		**5** (Chemical Bonding and Nomenclature)	Mastering Chemistry
6	9/30		**8** (Chemical Reactions)	Mastering Chemistry
7	10/7	**Exam 2** (Chapters 4,5,8)	**9** (Stoichiometry and the Mole)	Mastering Chemistry
8	10/14		**10** (Transfer of Electrons)	Mastering Chemistry
9	10/21		**11** (The Ideal Gas)	Mastering Chemistry
10	10/28	**Exam 3** (Chapters 9,10,11)	**12** (Solutions)	Mastering Chemistry
	10/31		**Last Day to Withdraw**	
11	11/4		**15** (Electrolytes, Acids and Bases)	Mastering Chemistry
12	11/11		**17** (The Chemistry of Carbon)	Mastering Chemistry
13	11/18	**Exam 4** (Chapters 12,15,17)		
14	11/25	**Thanksgiving**	**Thanksgiving Holiday**	**Thanksgiving Holiday**
15	12/2	**Final Exam***** (Comprehensive)		Finals must be completed by Monday, Dec. 9th.

** You have a window of one week to take each exam. For example, for Exam 1, BC students can make an appointment at the testing center (Learning Services) to take the exam any time from Monday, 9/16/2019 to Monday, 9/23/2019. For Virtual College students, arrangements must be made with your appropriate testing center by Wednesday, 9/11/2019, so that I can contact the official proctor by the date of the first exam. You also have a window of 7 days after the exam arrives at your testing center to complete the exam. The final exam must be completed by Monday, Dec. 9, 2019, for proper credit.

For Virtual College students, arrangements must be made with your appropriate testing center, so that I can contact the official proctor by the date of the first exam. You also have a window of 7 days after the exam arrives at your testing center to complete the exam.

Homework will be administered through Mastering Chemistry. Instructions for log in and accessing the homework system are here, or please scroll to the end of the page.

- Submit as an attached document in Desire2Learn "Dropbox". This is the preferred method.
- Drop off assignments in "Learning Services". The Learning Services staff will collect them in Dr. Chu's folder. This is practical only for Brazosport College students.
- Fax to Dr. Chu at 979-230-3559. If you choose this method, include a cover sheet with Dr. Chu's name and your name and phone number on it.

Due Dates: Assignments are due the following Monday. In other words, the assignments for the first week of classes are due on Monday of the second week of classes.

- Online submissions through D2L's "Dropbox" are active until midnight, Monday.
- If you submit your work to Learning Services, it must be turned in before Learning Services closes on Monday (9:30 pm).
- If you submit your work by fax, the deadline is midnight Monday.

Late submission Policy: You can turn in 2 assignments up to one week late with no penalty. Each chapter's homework assignment equals one assignment. Each lab report equals one assignment. Any assignment over one week late will be penalized

Important Semester Dates:
Last Day to Withdraw from Classes– Check BC Academic Calendar at http://catalog.brazosport.edu/index.php

Office Hours:

For fulltime faculty, office hours may change from semester to semester. Current faculty office hours are included on the syllabus, see link: https://brazosport.edu/faculty-and-staff/resources/course-syllabi-instructor-information/

For an adjunct faculty, no office hours are required, and they are not assigned an office. To set up an appointment with an adjunct, contact the instructor as per the email address on the syllabus, see link: https://brazosport.edu/faculty-and-staff/resources/course-syllabi-instructor-information/

V. STUDENTS WITH DISABILITIES

Brazosport College is committed to providing equal education opportunities to every student. BC offers services for individuals with special needs and capabilities including counseling, tutoring, equipment, and software to assist students with special needs. For student to receive any accommodation, documentation must be completed in the Office of Disability Services. Please contact Phil Robertson, Special Populations Counselor at 979-230-3236 for further information.

VI. TITLE IX STATEMENT

Brazosport College faculty and staff are committed to supporting students and upholding the College District's non-discrimination policy. Under Title IX and Brazosport College's policy FFDA (Local), discrimination based on sex, gender, sexual orientation, gender identity, and gender expression is prohibited. If you experience an incident of discrimination, we encourage you to report it. While you may talk to a faculty or staff member at BC, please understand that they are "Responsible Employees" and must report what you tell them to college officials. You can also contact the Title IX Coordinators directly by using the contact information below. Additional information is found on the Sexual Misconduct webpage at www.brazosport.edu/sexualmisconduct.

Alex Crouse, Director of Student Life and Title IX Coordinator
979-230-3355; alex.crouse@brazosport.edu

Mareille Rolon, HR Coordinator and Deputy Title IX Coordinator
979-230-3303; mareille.rolon@brazosport.edu

VII. 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.

Academic dishonesty violates both the policies of this course and the Student Code of Conduct. In this class, any occurrence of academic dishonesty will be referred to the Dean of Student Services for prompt adjudication, and may, at a minimum, result in F, in this course. Sanctions may be imposed beyond your grade in this course by the Dean of Student Services.

It is your responsibility to know and understand the student code of conduct with regard to scholastic honesty, as well as the consequences for a breach of conduct. If you cheat on an exam, you will receive an "F" for the class. Please refer to the Brazosport College Student Guide for more information. This is available online at http://brazosport.edu/students/for-students/student-services/.

VIII. ATTENDANCE AND WITHDRAWAL POLICIES

Class attendance contributes to your final grade, 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's office. If the student decides to drop out of the class, it is the responsibility of the student to initiate a withdrawal before the withdrawal deadline in order to get a "W" on their transcript. If this is not done the student will receive a grade based on test grades and class grades earned during their attendance and absence (i.e., zeros on all missed materials, exams, skills tests, and final exam). If you stop participating on-line and do not withdraw, you will receive a performance grade, usually an "F".

IX. COURSE REQUIREMENTS AND GRADING POLICY

For this class you must complete the following:

- ***Homework*** assignments will account for ***15%*** of your course grade. Homework will be administered through the Mastering Chemistry homework program from Pearson Higher Education.
- **Chapter quizzes** in D2L (Desire2Learn) will account for **20%** of your course grade (check the D2L course calendar each week for the availability date of each chapter quiz).
- **Exams**: Four equally weighted **exams** will account for **50%** of your course grade.

- **Final exam** (comprehensive) will account for **15%** of your course grade.

You will have a window of about one week to take each exam. Each exam will be available in http://brazosport.edu/students/for-students/places-services/learning-services/ (for Brazosport College students), or your local testing center (for Virtual College students) on Monday of the dates listed in the class schedule. Make an appointment with http://brazosport.edu/students/for-students/places-services/learning-services/or your local testing center to complete the exam. You will need your student ID and a number 2 pencil. Scantrons are provided. The following support materials are allowed during the exam: periodic table, one 8"x11" page of notes, and a scientific calculator.

One exam grade will be replaced by the final exam grade if the final exam grade is higher. For example, if you did poorly on an exam and your grade for that exam is 55, and your final exam grade is 85. ***This is also the only mechanism available to make up a missed exam.***

A. Grading

Homework assignments	15%
Chapter quizzes	20%
Exams	50%
Final Exam	15%

Final grade will be determined by the following system:

Grade	Final Average
A	90-100
B	80-89
C	70-79
D	60-69
F	Below 60

X. STUDENT CONDUCT STATEMENT

Students are expected to be aware of and follow the Brazosport College Student Code of Conduct. Students have violated the Code if they "fail to comply with any lawful directions, verbal or written, of any official at BC." Lawful directions include precautions and requirements taken to prevent the spread of COVID-19 at Brazosport College. Students who do not follow safety requirements, including the wearing of a mask, may be removed from class by their instructor and referred to the Dean of Student Services.

XI. CAMPUS CLOSURE STATEMENT

Brazosport College is committed to the health and safety of all students, staff, and faculty and adheres to all federal and state guidelines. The College intends to stay open for the duration of the semester and provide access to classes and support services on campus in the safest way possible. The College will also comply with lawful orders given by applicable authorities, including the Governor of Texas, up to and including campus closure. It is possible that on campus activities may be moved online and/or postpone if such orders are given.

XII. 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.

XIII. OTHER STUDENT SERVICES INFORMATION

Information about the Library is available at http://brazosport.edu/students/for-students/places-services/library/about-the-library/ or by calling 979.230.3310.

For assistance with online courses, an open computer lab, online and make-up testing, audio/visual services, and study skills, visit Learning Services next to the Library, call 979-230-3253, or visit http://brazosport.edu/students/for-students/places-services/learning-services/

For drop-in math tutoring, the writing center, supplemental instruction, and other tutoring including e-tutoring, visit the Student Success Center, call 979-230-3527, or visit http://brazosport.edu/students/for-students/student-success-center/math-center/

To contact the Physical Sciences and Process Technologies Department call 979-230-3618.

The Student Services provides assistance in the following:

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

To reach the Information Technology Department for computer, email, or other technical assistance call the Helpdesk at 979.230.3266.

Get the information you need – when you need it. Click http://geni.us/BRAZO to install **BC Connect** on your mobile device to receive reminders, explore careers, map your educational plan, be in the know about events, find out about scholarships, achieve your goals and much more.

Dear Student:
In this course you will be using MasteringChemistry®, an online tutorial and homework program that accompanies your textbook.

What You Need:

- ✓ **A valid email address**
- ✓ **A student access code** (included in your textbook if you bought it from the BC Bookstore)
- ✓ **The ZIP code for your school: __77566_____**

A Course ID: _____ (Provided by your instructor)

Register

- Go to www.masteringchemistry.com and click **New Students** under **Register**.
- To register using the Student Access Code above select **Yes, I have an access code**. Click **Continue**.
- **License Agreement and Privacy Policy:** Click **I Accept** to indicate that you have read and agree to the license agreement and privacy policy.
- Select the appropriate option under "Do you have a Pearson Education account?" and supply the requested information. Upon completion, the **Confirmation & Summary** page confirms your registration. This information will also be emailed to you for your records. You can either click **Log In Now** or return to www.masteringchemistry.com later.

Log In

- Go to www.masteringchemistry.com.
- Enter your Login Name and Password and click **Log In**.

Enroll in Your Instructor's Course and/or Access the Self-Study Area

Upon first login, you'll be prompted to do one or more of the following:

- **Join your MasteringChemistry course** by entering the **MasteringChemistry Course ID** provided by your instructor**.**

Click **Save** and **OK**.

Congratulations! You have completed registration and have enrolled in your instructor's MasteringChemistry course. To access your course from now on, simply go to www.masteringchemistry.com, enter your Login Name and Password, and click **Log In**. If your instructor has created assignments, you can access them in the **Assignments Due Soon** area or by clicking **View All** in this area. Otherwise, click on **Study Area** to access self-study material.

Support

Access Customer Support at www.masteringchemistry.com/support, where you will find:

- System Requirements
- Answers to Frequently Asked Questions
- Additional contact information for Customer Support, including Live Chat