



Division of Natural Sciences and Horticulture

Department of Chemistry

<http://learning.hccs.edu/programs/chemistry>

CHEM 1111: General Chemistry I Laboratory CRN 18705

Spring (Second-start) 2021 | 12 Weeks (2.16.2021 – 5.16.2021)

HCC Online | Online College

<https://eagleonline.hccs.edu/login/ldap>

1 credit unit (3-hours) | 48 hours per semester

Instructor Contact Information

Instructor: Anuoluwa Adegoke, Ph.D.

Office Hours: Sat 12-3:00 pm

CANVAS Conference

By appt.

HCC Email: anuoluwa.adegoke@hccs.edu

Please feel free to contact me concerning any problems that you are experiencing in this course. Your performance in my class is very important to me. I am available to hear your concerns and just to discuss course topics. Your HCC Email address or CANVAS Inbox is required as the preferred method of contact, should you contact me, please use your HCC Student Email address. I will only be able to send correspondence from Eagle online to your student account. I will reply to messages within 24 hours. I will reply to weekend messages on Monday mornings. Please do not wait until last minute to make urgent request.

What's Exciting about This Course

General Chemistry 1 Laboratory (CHEM 1111) is a Laboratory course related to the study of atomic structure, chemical reactions, thermodynamics, electronic configuration, chemical bonding, molecular structure, gases, states of matter, and properties of solutions. CHEM 1111 is a Core Curriculum Course. This course is intended to reinforce the concepts learned in General Chemistry 1 class through scientific investigations in the Chemistry Lab. Students will be able to develop

modern chemistry lab techniques, develop scientific reasoning and intellectual abilities, apply data interpretation and analysis and develop teamwork skills.

My Personal Welcome

Welcome to General Chemistry 1 Laboratory— I'm delighted that you have chosen this course. One of my passions in this laboratory course is when students develop a perspective of chemistry as a scientific process of discovery. As you read and wrestle with new ideas and facts that may challenge you, I am available to support you. The fastest way to reach me is by my HCC email. The best way to really discuss issues is in person and I'm available during posted office hours to tackle any questions you might have. My goal is for you to walk out of this course with a better understanding of how you can use chemistry concepts and chemical principles in real-life. So please visit me or contact me whenever you have a question.

Prerequisites and/or Co-Requisites

This course requires college-level reading and writing skills. Research indicates that you are most likely to succeed if you have already taken and passed Reading 0342, Math 0312 and Writing 0310/ 0349 or Math 0312 with INRW 0420. For this course, additional prerequisites are completion of one year of high school chemistry or CHEM 1305 (Introduction to Chemistry) and MATH 1314 (College Algebra). Other minimum requirements for enrollment in CHEM 1311 include placement in college-level reading (or take INRW 0420). It is also highly recommended to take the corresponding lecture, CHEM 1311 with CHEM 1111. If you have enrolled in this course having satisfied these prerequisites, you have a higher chance of success than students who have not done so. Please carefully read and consider the repeater policy in the Student Handbook.

Please carefully read and consider the repeater policy in the [HCCS Student Handbook](#).

Eagle Online Canvas Learning Management System

This section of CHEM 1111 is an online course and will use Eagle Online Canvas for all aspects of this course. All of the course supporting materials (Laboratory experiments videos) are uploaded on Canvas. Watching the live videos of the various experiments will greatly help you to understand concepts

This course will be taught online, but it is NOT a self-paced course. You must meet the established deadlines for submitting the assignments. The flexibility of an online course allows you to choose the time of day or night to "enter" the virtual classroom. It is recommended that you log onto Canvas daily for messages, announcements, assignment submissions.

A working computer with access to the internet is critical for this course. There may be some programs and or links which may not be viewable from a smart phone or tablet.

It is the student's responsibility to ensure that they have an internet accessible computer as well as the text for this course. It is recommended that you USE **FIREFOX OR CHROME AS YOUR BROWSER.**

Instructional Materials

Textbook Information

The materials listed below are *required* for this course

1. Lab Manual

Available at [HCC Bookstore](#)

Laboratory Experiments for Chemistry: The Central Science. Custom Edition for HCC CHEM 1111 ISBN-13-978-0-136-68805-1

2. A Nonprogrammable basic model scientific calculator like TI -30X.



Other Instructional Resources

Tutoring

HCC provides free, confidential, and convenient academic support to HCC students in an online environment and on campus. Tutoring is provided by HCC personnel in order to ensure that it is contextual and appropriate. Visit the [HCC Tutoring Services](#) website for details.

For online tutoring: HCC offers 24-hour access to tutors online. Students can get free tutoring for a variety of subjects. Visit: <https://hccs.upswing.io/>
The online tutoring service is also available for students during the breaks and holidays.

Videos

In addition to the videos provided on CANVAS for each chapter in this course, here is

another useful video resource to use: STEM educational video platform:
<https://www.numerade.com/>.

Libraries

The HCC Library System consists of 9 libraries and 6 Electronic Resource Centers (ERCs) that are inviting places to study and collaborate on projects. Librarians are available both at the libraries and online to show you how to locate and use the resources you need. The libraries maintain a large selection of electronic resources as well as collections of books, magazines, newspapers, and audiovisual materials. The portal to all libraries' resources and services is the HCCS library web page at <http://library.hccs.edu>.

Supplementary Instruction

Supplemental Instruction is an academic enrichment and support program that uses peer-assisted study sessions to improve student retention and success in historically difficult courses. Peer Support is provided by students who have already succeeded in completion of the specified course, and who earned a grade of A or B. Find details at <http://www.hccs.edu/resources-for/current-students/supplemental-instruction/>.

Course Overview

CHEM 1111 is intended for students majoring in one of the physical sciences or life sciences, engineering, or for students who are pursuing pre-professional programs in medicine, dentistry, pharmacy, veterinary medicine, or other health programs. The course is also beneficial to students who are preparing themselves for higher level science courses in their respective curricula.

Science and engineering majors study atomic structure, chemical reactions, thermodynamics, electronic configuration, chemical bonding, molecular structure, gases, states of matter, and properties of solutions. The laboratory includes appropriate experiments.

Core Curriculum Learning Outcomes (CCLOs)

The HCCS Chemistry Discipline Committee has specified that the course address the following core objectives:

- Reading/ Writing
- Speaking/Listening
- Critical Thinking
- Computer/Information Literacy

Program Student Learning Outcomes (PSLOs) for all CHEM Courses

Can be found at <http://learning.hccs.edu/programs/chemistry>

Course Student Learning Outcomes (CSLOs) for CHEM 1111

SLO1. Learn Proper Safety Practice and Measures in the chemistry laboratory.

SLO2. Practice Basic Lab Techniques of Measurement and Conversion

SLO3: Perform separation of mixtures using proper technique

SLO4: Identify physical properties

SLO5: Observe various chemical reactions and write supporting chemical equations

SLO6: Calculate empirical and molecular formulas and reaction yield

SLO 7: Apply thermochemical principles to evaluate energy relationships based on specific heat, calorimetry, and temperature changes.

SLO 8. Relate the properties of gases with the gas laws and extend the application of these relationships to reaction stoichiometry, gas mixtures, and effusion/diffusion of gases.

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SLO 8. Relate the properties of gases with the gas laws and extend the application of these relationships to reaction stoichiometry, gas mixtures, and effusion/diffusion of gases.

SLO 9. Depict chemical bonding with dot structures and valence bond theory and determine the molecular shapes (geometry) of molecules based on VSEPR and valence bond theory.

Learning Objectives for each CSLO can be found at [Learning Objectives for CHEM 1111](#).

Student Success

Expect to spend at least twice as many hours per week outside of class as you do in class studying the course content. Additional time will be required for written assignments. The assignments provided will help you use your study hours wisely. Successful completion of this course requires a combination of the following:

- Reading the textbook and lab manual
- Completing all assigned laboratory assignments

There is no short cut for success in this course; it requires reading (and probably re-reading) and studying the material using the course objectives as your guide.

Instructor and Student Responsibilities

As your Instructor, it is my responsibility to:

- Provide the grading scale and detailed grading formula explaining how student grades are to be derived
- Facilitate an effective learning environment through class activities, discussions, and lectures
- Provide a description of any special projects or assignments
- Inform students of policies such as attendance, withdrawal, tardiness and make up
- Provide the course outline and class calendar which will include a description of any special projects or assignments
- Arrange to meet with individual students as needed

To be successful in this class, it is the student's responsibility to:

- Attend "online" class and participate in class discussions and activities
- Read and comprehend the textbook and instructor notes
- Complete the required assignments and exams
- Practice problems
- Ask for help in a timely manner when there is a question or problem
- Keep copies of all paperwork, including this syllabus, handouts, and all assignments
- Keep up with your grades which will be posted in the Canvas Gradebook
- Attain a raw score of at least 70% on all assignments
- Be aware of and comply with academic honesty policies in the [HCCS Student Handbook](#)

Academic Integrity

Students are responsible for conducting themselves with honor and integrity in fulfilling course requirements. Disciplinary proceedings may be initiated by the college system against a student accused of scholastic dishonesty. Penalties may include a grade of "F" on the particular assignment, failure in the course, academic probation, or even dismissal from the college. Scholastic dishonesty includes, but is not limited to, cheating on a test, plagiarism, and collusion. In this class, the penalty for willful cheating on exams is a grade of F in the course. This is the standard policy of the Sciences Department.

Student Work

All assignments and tests submitted to your instructor shall be performed solely by you. You will not submit work that is plagiarized or that otherwise violates copyright laws of the United States of America. If you have been found guilty of academic misconduct by your college of enrollment disciplinary action may result in banning you from the course and/or future enrollment at Houston Community College. Actions contrary to academic integrity will NOT be tolerated. Activities that have the effect or intention of interfering with learning or fair evaluation of a student's work or performance are considered a breach of academic integrity.

Examples of such unacceptable activities include, but are not limited to:

- Cheating - intentionally using or attempting to use unauthorized material, assistance or study aids in any academic work.
- Plagiarism - representing another's ideas, words, expressions or data in writing or presentation without giving proper credit, failing to cite a reference or failing to use proper documentation, using works of another gained over the Internet and submitted as one's own work.
- Falsification and/or Misrepresentation of Data - submitting contrived or made-up information in any academic exercise.
- Facilitating Academic Dishonesty - knowingly helping or attempting to help another violate any provision of the academic integrity policy.
- Multiple Submission - submitting, without prior approval from the instructor, any work submitted to fulfill academic requirements in another class.
- Unfair Advantage - trying to gain unauthorized advantage over fellow students.

Student Success in CHEM 1111 and Laboratory Reports

CHEM 1111 will introduce students to the methods, apparatus, software and instruments used in chemistry laboratory.

A total of 9 experiments will be assigned. The lowest grade lab will be dropped. Students are required follow all the stepwise instruction provided on CANVAS for submission of all the selected experiments upon watching the live videos of the experiments.

The Report Form, pre-lab and post lab should all be completed and submitted on CANVAS as stated in the submission instruction. Each experiment must be submitted by the due date stated on CANVAS to receive full-credit. Late work will not be accepted.

All labs are worth 100 points.

Pre-lab, post-lab and Report Form are graded based on neatness, proper significant digits in measurements, reasonableness, or accuracy. General principles, problems, fundamental laws, and theories are discussed in Introduction/Theory section of each experiment. Course content provides a foundation for work in advanced chemistry and related sciences.

The final exam will be based on the Labs covered. All quizzes and exams in this course will require the use of Respondus Lockdown browser + webcam. Please see below for instructions on how to use Lockdown browser + webcam.

CHEM 1111 requires conceptual understanding and application, the experiments in this course are designed to reinforce the concepts learned in CHEM 1311. If you do not have pre-requisite CHEM1311 or take CHEM1311 as co-requisite, you are taking this class at your own risk or subject to mandatory withdrawal.

Mastering chemistry depends heavily on a person's reading and math skills and of course the person's determination/dedication and time spent in effective study. Plan to brush up your math skill if you feel rusty and dedicate about 6 hours a week for this course. Use time management tool/skill to help your study.

LockDown Browser + Webcam Requirement

This course requires the use of LockDown Browser and a webcam for online exams. The webcam can be the type that's built into your computer or one that plugs in with a USB cable.

Watch this brief video to get a basic understanding of LockDown Browser and the webcam feature.

<https://www.respondus.com/products/lockdown-browser/student-movie.shtml>

Download Instructions

Download and install LockDown Browser from this link:

<https://download.respondus.com/lockdown/download.php?id=355612798>

Once Installed

- Start LockDown Browser
- Log in to Canvas
- Navigate to the quiz

Note: You won't be able to access a quiz that requires LockDown Browser with a standard web browser. If this is tried, an error message will indicate that the test requires the use of LockDown Browser. Simply start LockDown Browser and navigate back to the exam to continue.

Guidelines

When taking an online quiz, follow these guidelines:

- Ensure you're in a location where you won't be interrupted
- Turn off all other devices (e.g. tablets, phones, second computers) and place them outside of your reach
- Before starting the test, know how much time is available for it, and also that you've allotted sufficient time to complete it
- Clear your desk or workspace of all external materials not permitted - books, papers, other devices
- Remain at your computer for the duration of the test
- If the computer, Wi-Fi, or location is different than what was used previously with the "Webcam Check" and "System & Network Check" in LockDown Browser, run the checks again prior to the exam
- To produce a good webcam video, do the following:
 - Avoid wearing baseball caps or hats with brims
 - Ensure your computer or device is on a firm surface (a desk or table). Do NOT have the computer on your lap, a bed, or other surface where the device (or you) are likely to move
 - If using a built-in webcam, avoid readjusting the tilt of the screen after the webcam setup is complete

- Take the exam in a well-lit room, but avoid backlighting (such as sitting with your back to a window)
- Remember that LockDown Browser will prevent you from accessing other websites or applications; you will be unable to exit the test until all questions are completed and submitted

Getting Help

Several resources are available if you encounter problems with LockDown Browser:

- The Windows and Mac versions of LockDown Browser have a "Help Center" button located on the toolbar. Use the "System & Network Check" to troubleshoot issues. If an exam requires you to use a webcam, also run the "Webcam Check" from this area
- Respondus has a Knowledge Base available from support.respondus.com. Select the "Knowledge Base" link and then select "Respondus LockDown Browser" as the product
- If your problem is with a webcam, select "Respondus Monitor" as your product

Eagle Online Help Center and Canvas Help

HCC Online publishes the [Eagle Online \(Canvas\) Technical Requirements for HCC Students](#).

You can find the answers to many of your questions about how to use Canvas by clicking the **Help** link in the bottom left corner of the Canvas window and then clicking **Search the Canvas Guides**.

If you have technical issues with Canvas, click the **Help** link and then click **HCC Online Help**.

[My Eagle Student SignIns](#)

Eagle Online Help Center: <http://www.hccs.edu/online/technical-support/>

Eagle Online Technical Support	713-718-5275, option 3
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[Student Help form](#) (Recommended to request help)

IT (Password reset) Customer Support	713-718-8800, option 1
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Grading

The lab reports, including the pre- and post- lab questions, are graded on the basis of completeness, neatness, consistent decimal digits in measurements, reasonableness or accuracy and the correctness of the calculations tied to the experimental results.

Assigned lab reports including report form, Pre and Post Laboratory = 80%

of total course grade.
Final Exam = 20%
Total = 100 %

The following grade distribution scale will determine your course grade:

90 - 100 %	A
80 - 89 %	B
70 - 79 %	C
60 - 69 %	D
59 % AND BELOW	F

FINAL GRADE OF FX: Students who stop attending class and do not withdraw themselves prior to the withdrawal deadline will be assigned the final grade of "FX" at the end of the semester, compared to an earned grade of "F" which is due to poor performance.

Students who receive financial aid but fail to attend class will be reported to the Department of Education and may have to pay back their aid. A grade of "FX" is treated exactly the same as a grade of "F" in terms of GPA, probation, suspension, and satisfactory academic progress.

HCC Grading Scale can be found on this site under Academic Information:
<http://www.hccs.edu/resources-for/current-students/student-handbook/>

Student Conduct in an Online Environment

In an online teaching environment, every student is expected to follow the code of conduct in the student's handbook. Any communication with the instructor that is seen as disrespectful, offensive or inappropriate will NOT be tolerated and will be promptly reported to the appropriate campus administrators for further actions.

Email Procedures

I check my email frequently and strive for a less than 24-hour response time to your messages, but please exercise patience. In order to manage the great many emails I receive from students, I am asking that you include the following information in each email:

1. Identify the course number and course title.

- Identify yourself stating your full name as you registered for this course.
- Identify the assignment and date due or the subject of your message/question.

COURSE CALENDAR

WEEK	ASSIGNED EXPERIMENTS
2/27	Introduction/Procure Lab manual
3/6	1. Lab Safety 2. Basic Laboratory Techniques
3/13	3. Separation of the components of a mixture
3/20	SPRING BREAK
3/27	4. Moles and Chemical Formulas
4/3	5. Activity series
4/10	6. Reactions in Aqueous Solutions: Metathesis reactions and net ionic reactions
4/17	7. Behavior of Gases: Molar mass of a vapor
4/24	8. Heat of Neutralization
5/1	9. Molecular Geometries of Covalent Molecules

5/12	Final Exam (5/12 – 5/14)
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Syllabus Modifications:

The instructor reserves the right to modify the syllabus at anytime during the semester and will promptly notify students in writing, typically by e-mail, of any such changes.

Important Dates:

Official Date of Record: 2/25/2021

Last Day to Withdraw: 4/15/2021

Other Course Information

Chemistry Program Information

Please visit the chemistry program page for more about our degree offering, requirements, employment prospects and more.

<https://www.hccs.edu/programs/areas-of-study/science-technology-engineering--math/chemistry/>

HCC Policies

Here's the link to the HCC Student Handbook <http://www.hccs.edu/resources-for/current-students/student-handbook/> In it you will find information about the following:

Academic Information	Incomplete Grades
Academic Support	International Student Services
Attendance, Repeating Courses, and Withdrawal	Health Awareness
Career Planning and Job Search	Libraries/Bookstore
Childcare	Police Services & Campus Safety
disAbility Support Services	Student Life at HCC
Electronic Devices	Student Rights and Responsibilities
Equal Educational Opportunity	Student Services
Financial Aid TV (FATV)	Testing
General Student Complaints	Transfer Planning
Grade of FX	Veteran Services

The EGLS³ ([Evaluation for Greater Learning Student Survey System](#)) will be available for most courses near the end of the term until finals start. This brief survey will give invaluable information to your faculty about their teaching. Results are anonymous and will be available to faculty and division chairs after the end of the term. EGLS³ surveys are only available for the Fall and Spring semesters. EGLS3 surveys are not offered during the Summer semester due to logistical constraints.
<http://www.hccs.edu/resources-for/current-students/egls3-evaluate-your-professors/>

Campus Carry Link

Here's the link to the HCC information about Campus Carry:
<http://www.hccs.edu/departments/police/campus-carry/>

HCC Email Policy

When communicating via email, HCC requires students to communicate only through the HCC email system to protect your privacy. If you have not activated your HCC student email account, you can go [to HCC Eagle ID and activate it now.](#) You may also use Canvas Inbox to communicate.

Housing and Food Assistance for Students

Any student who faces challenges securing their foods or housing and believes this may affect their performance in the course is urged to contact the Dean of Students at their college for support. Furthermore, please notify the professor if you are comfortable in doing so.

This will enable HCC to provide any resources that HCC may possess.

Office of Institutional Equity

Use the link below to access the HCC Office of Institutional Equity, Inclusion, and Engagement (<http://www.hccs.edu/departments/institutional-equity/>)

disAbility Services

HCC strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability (including mental health, chronic or temporary medical conditions), please meet with a campus Abilities Counselor as soon as possible in order to establish reasonable accommodations. Reasonable accommodations are established through an interactive process between you, your instructor(s) and Ability Services. It is the policy and practice of HCC to create inclusive and accessible learning environments consistent with federal and state law. For more information, please go to <http://www.hccs.edu/support-services/disability-services/>

Title IX

Houston Community College is committed to cultivating an environment free from inappropriate conduct of a sexual or gender-based nature including sex discrimination, sexual assault, sexual harassment, and sexual violence. Sex discrimination includes all forms of sexual and gender-based misconduct and violates an individual's fundamental rights and personal dignity. Title IX prohibits discrimination on the basis of sex- including pregnancy and parental status in educational programs and activities. If you require an accommodation due to pregnancy please contact an Abilities Services Counselor. The Director of EEO/Compliance is designated as the Title IX Coordinator and Section 504 Coordinator. All inquiries concerning HCC policies, compliance with applicable laws, statutes, and regulations (such as Title VI, Title IX, and Section 504), and complaints may be directed to:

David Cross
Director EEO/Compliance
Office of Institutional Equity & Diversity
3100 Main
(713) 718-8271
Houston, TX 77266-7517 or Institutional.Equity@hccs.edu
<http://www.hccs.edu/departments/institutional-equity/title-ix-know-your-rights/>

Office of the Dean of Students

Contact the office of the Dean of Students to seek assistance in determining the correct complaint procedure to follow or to identify the appropriate academic dean or supervisor for informal resolution of complaints.

<https://www.hccs.edu/about-hcc/procedures/student-rights-policies--procedures/student-complaints/speak-with-the-dean-of-students/>**Department Chair Contact Information**

Chemistry Department Chair

If you have questions or concerns about the course, please see your instructor. Should you wish to contact the department chair, below is his information:

Dr. Emmanuel Ewane, emmanuel.ewane@hccs.edu; 713-718-5414