

**General Chemistry 1 – CHM 151 – IO2
Cape Fear Community College
Fall 2016**

Instructor: Ryan McDonnell
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Lecture and Lab: Online

Office Information
Office: N203K
Office Phone: 910-362-7654
Office Hours:
Mon-Thur: 9:30-10:30am
Friday: 12-1pm

Blackboard Course page is used for announcement and handouts

COURSE DESCRIPTION

This course covers fundamental principles and laws of chemistry. Topics include measurement, atomic and molecular structure, periodicity, chemical reactions, chemical bonding, stoichiometry, thermochemistry, gas laws, and solutions. Upon completion, students should be able to demonstrate an understanding of fundamental chemical laws and concepts as needed in CHM 152.

This is a Universal General Education Transfer Component (UGETC) course

COURSE PREREQUISITES

- (1) A grade of 'C' or better in MAT 080, 090, 095, 161 or 171 or equivalent placement
- (2) A grade of 'C' or better in ENG 095 or equivalent.

Lecture hours per week: 3 SEMESTER HOURS CREDIT: 4
Lab hours per week: 3

COURSE OBJECTIVES Upon completion, students should be able to demonstrate a basic understanding of chemistry and the interrelationships of the following topics:

Topics Covered

Measurements & units	Gaseous States
Atoms, Molecules & Ions	Thermochemistry
Chemical Formulas, Equations and Calculations	Quantum Theory of the atom
Chemical Reactions	Molecular Shape and Structure

REQUIRED COURSE BOOK and SUPPLIES

Text: *Chemistry: Structure & Properties* by Tro, Pearson Publishing

Lab kit: *Hands on Labs General Chemistry I package*

This lab kit can be purchased by the bookstore, or ordered through the following link:

<https://myhol.holscience.com/enroll/crdd-zktr-ksmm-mndk>

This link is unique to this class. If you try to create an account without this link, you will not have access in your class.

This course emphasizes the following general education competency:

Scientific Reasoning: Students engage in scientific reasoning when they use fundamental scientific concepts and theories to analyze problems, observations, and/or experiments in the life and physical sciences. Students demonstrate scientific reasoning when they:

- Apply appropriate scientific concepts, theories, and language to problems, observations, or experiments
- Utilize scientific data to analyze problems, observations, or experiments
- Apply scientific observations, calculations, and/or measurements to problems or experiments
- Articulate conclusions about problems, observations, or experiments using appropriate scientific concepts and data

Critical Thinking:

Critical thinking is the deliberate process of questioning, evaluating, and responding to problems, scenarios, and arguments in order to reach sound solutions, decisions, and positions. Students demonstrate critical thinking when they:

- Ask pertinent questions that clarify and focus a problem, scenario, or argument
- Evaluate the quantity, quality, and usefulness of information
- Articulate a sound solution, decision, or position based on appropriate standards of reasoning
- Monitor and reflect upon the quality and fairness of their reasoning

Lab/Class Rules

- No food or allowed in the classroom. Drinks must have a lid on them.
- your cell phone ringer must be off at all times during class, unless it is a pre-discussed emergency with your instructor.
- A calculator must be present in all classes. Cell phones will not be allowed on class assignments.
- Disruptions will result in penalty points

Students will be held to the highest standards of language and content in all interaction, whether online or in person. Abusive and derogatory language, actions, or content will not be tolerated. This non-discrimination policy includes face-to-face interactions, email, online discussions and all course related content and materials. To learn more about online interaction, please see “The Core Rules of Netiquette”, from the book Netiquette by Virginia Shea at: [http:// www.albion.com/netiquette/corerules.html](http://www.albion.com/netiquette/corerules.html)

PERFORMANCE EXPECTATIONS AND ATTENDANCE

In order to demonstrate competency in chemistry, all students are required to:

- Finish all 3 chapter exams, and the final exam.
- Complete all 11 lab assignments.
- Complete all 12 homework assignments
- Complete all 12 quiz assignments

General Week structure & expected Workload

Monday: new module starts (usually a new chapter), old homework due

Wednesday: quiz from previous module due, module quiz opens

Friday: lab due

Monday: homework due, new module starts

Students should expect to spend 9-12 hours per week to complete this course, broken down as following:

Listening to Lecture (2 hours)

Reading (2 hours)

Online Assignments (2-3hours)

Lab Assignments (2 -3 hours)

GRADING SCALE AND GRADE DISTRIBUTION

The grading scale as delineated below is established in the catalog and cannot be modified. Distribution of assessment weights is the prerogative of the instructor but must be delineated in the syllabus.

Grade	Percentage
A:	92-100
B:	84-91
C:	76-83
D:	68-75
F:	0-67

Homework: (10% total, in My Lab and Mastering)

Students will complete homework through the My lab and Mastering website. Each chapter will have an assignment, which will close 1 week after each chapter is completed. These dates will be notified in class, on blackboard, and in the Pearson program. **For every day HW is late, a 5% penalty is given.**

Quizzes (10% total, in My Lab & Mastering)

Each non-exam week a pre-class quiz will close at 6pm on Monday night. These will generally be shorter and simpler than the homework, and are just checking to make sure that you have started to study before each class. CPU, power and/or internet problems are NOT sufficient excuses for not finishing quizzes. Plan to finish these assignments early in case something goes wrong. **No late quizzes will be allowed.**

Labs (at Hands on Labs): (30%)

Weekly “laboratory” assignments are to be completed in your kitchen or in the online site <https://author.holscience.com/auth/login>

After completion, all data will be entered into the online site and then printed as a pdf. This pdf will then be uploaded to the weekly module in blackboard.

Exams: (30% total, 10% each)

3 Exams will take place on in the classroom as appointed by the schedule. Afterwards, a short lab assignment or group project will be completed.

Exam 1: Week of September 19th – 26th

Exam 2: Week of October 24th – 31st

Exam 3: Week of November 30th – December 7th

note: schedule may change to better suit the semester

These exams are fill in the blank and multiple choice questions primarily focusing on using the concepts and/or equations presented in the lecture (and sometimes laboratory). Partial credit will be awarded when students can demonstrate some understanding of the problem. You can take the exam anytime over a 7 day period, however once you start the exam, you have 120 minutes to complete it. Only one attempt will be allowed. No late exams will be allowed. Scores will not be visible until the end of the 7 day period.

CPU, power and/or internet problems are **NOT** sufficient excuses. Plan to finish these assignments with extra time in case something goes wrong.

Final exam: (20%)

The Final Exam is cumulative and is the only portion of this course that is required to be taken face-to-face. **Students will take the cumulative final exam at CFCC or proctored at another college.** The cumulative final exam MUST be proctored on a college campus, **NO EXCEPTIONS.** If you are to have your Final Exam proctored at another college, arrangements must be approved by **Monday, December 7th.**

(arrangements are the student’s responsibility but must be approved by your instructor).

The final exam is mandatory; not taking the Final Exam will result in a failing grade for the course.

FINAL EXAM DATE: Saturday, Dec. 10, 2016

FINAL EXAM TIME: 9:00 AM

FINAL EXAM LOCATION:

Cape Fear Community College

Downtown Campus

Natural Science Building

Room N309

ATTENDANCE REQUIREMENTS

Because this is an Internet course, attendance cannot be taken daily. The following guidelines apply for this course:

- Missing 3 weeks of consecutive homework assignments and/or labs will result in a course grade of "F"
- Missing a combination of any 2 exams, or 4 weekly quizzes will result in a course grade of "F"

Contingency Plan: If there is an emergency and the instructor or an appropriate substitute does not meet with the class, wait fifteen minutes. Then, everyone in the class should sign a roll sheet and designate someone to take it to the Sciences Department Chair or Secretary in U436

Withdrawals:

You are responsible for noting the deadline for withdrawal from the course. I will not turn in any withdrawal forms to the registration office. This is your responsibility. Withdrawals will not be given once the 18 hours of absences has been exceeded. Please familiarize yourself with the criteria and withdrawal deadline dates in the *CFCC Catalog and Student Handbook*

N407 Science Study Room:

N407 is a study room for use by all biology & chemistry students at CFCC. The room is equipped with computers with internet access, reference materials including the CD-ROM REVEALED, skeletons, study posters, microscopes and slides. Learning Lab Science Tutors staff the study room and are available for tutoring. You must fill out a permission form to have access to this room and tutors. **No printers are available in N407.**

Religious Observances: Students will be allowed two days of excused absence each academic year for religious observances required by the faith of the students. These excused absences will be included in the twenty (20%) of allowable clock hour absences. Students are required to provide written notice of the request for an excused by completing the Religious Observance Absence form available in Student Development. The completed form must be submitted to the Vice President of Student Development or his/her designee a minimum of ten (10) school days prior to the religious observance. The Vice President of Student Development or his/her designee will notify the instructor within three (3) school days of receiving the request. Students will be given the opportunity to make up any tests or other work missed due to the excused absence and should work with their instructor's in advance of the excused absence to delineate how make up the missed coursework (N.C.G.S. 115D-5)

ACADEMIC HONESTY

CFCC requires of students complete academic honesty in the completion of all assigned work. The discipline policy for academic dishonesty can be found in the CFCC Catalog & Student Handbook.

If cheating is found, the student will receive a grade of "F" on the assignment.
A 2nd offense is an automatic "F" in the course.

MyCFCC Portal

You have a CFCC email account. Access the website <http://cfcc.edu> and click on the myCFCC link. From there you can enter into blackboard, which is used heavily in this class, and Webadvisor, which is used to register for future classes.

You will also see the email icon, which is your student email. Some information from CFCC will ONLY be emailed to this address, and not sent through postal mail as in the past, so it is very important that you check this account periodically. To access this account, please visit the CFCC website cfcc.edu and click on the myCFCC link; then follow the instructions to log in. Your email address is yourlogin@mail.cfcc.edu. This email account is for your use while you are attending classes and will still remain active after you leave the college. Your account may be used for personal as well as academic email and is subject to the CFCC Acceptable Use Policy.

STUDENTS WITH SPECIAL NEEDS

Students with a documented disability or needing reasonable accommodation in this course (such as extended testing time), must register with the Office of Disability Services in Student Services at the Downtown Campus, U218 (362-7012/7158). Students are required to provide the instructor a copy of the Accommodation Letter as soon as possible, preferably by the end of the first week of classes. You should then meet with me to make mutually agreeable arrangements based on the recommendations of the Accommodation Letter.

SMOKING ON CAMPUS

Tobacco use is prohibited on all CFCC property, except in designated areas. If a student is found smoking on the campus outside of the designated area, the first offense is a warning and the second offense may result in disciplinary action.

NO CHILDREN ON CAMPUS

Children cannot be taken into classrooms, laboratories or shops unless authorized by College personnel. Children cannot be left unattended on campus including the Learning Resource Center, the cafeteria, lounge areas, registrations sites, administrative offices or parking lots. Failure to comply with this policy will lead to disciplinary action.

DISCLAIMER

Information contained in this syllabus was, to the best knowledge of the instructor, considered correct and complete when distributed for use at the beginning of the semester. However, this syllabus should not be considered a contract between Cape Fear Community College and any student, nor between the instructor and any student. The instructor reserves the right, acting within the policies and procedures of the college, to make changes in course content or instructional techniques without notice or obligation.

Lab Syllabi

Weekly “laboratory” assignments are to be completed in your kitchen or in the online site <https://author.holscience.com/auth/login>

After completion, all data will be entered into the online site and then printed as a pdf. This pdf will then be uploaded to the weekly module in blackboard.

A few labs will be completed in blackboard as there is currently now way to add those labs to the website.

Lab Reports must be received by their designated due date. Late labs will be penalized by 5% per day. Laboratory assignments will also include exercises and simulations to be completed on the Web. In general, all lab reports are during the Friday of the module. Graded material will be returned within 1 week of the turn in period.

- (1) Purchase HOL Lab Box from the CFCC bookstore or on-line:
- (2) Make sure you dress properly while working through your “kitchen laboratory”. See safety lab for more information on proper laboratory etiquette.
- (3) After completion, all data will be entered into the online site and then printed as a pdf. This pdf will then be uploaded to the weekly module in blackboard.
Note: once the ‘download pdf’ button is pressed, the lab cannot be changed. Make sure you’re data is complete.
- (4) Several labs will require a written lab report to be turned IN ADDITION to the pdf from HOL. Each student **MUST** complete his or her own lab report. Copying any part of another lab report is considered plagiarism.
- (5) All written lab reports **MUST** be completed using Microsoft Word, Microsoft Excel or Google Docs. Incorporate all your data into the Microsoft Word Document you will type your lab report on.

Lab Reports will consist of 4 sections:

Name, Date, Title of Laboratory

1. Introduction (What is the IDEA of the experiment?)
2. Procedure (How, specifically did it happen?)
3. Results (What data was obtained? How was the data calculated?)
4. Discussion (DISCUSS what the data means)

Each section should be written in past tense, paragraph form.

These sections are written in larger detail in the lab report guide: see lab report folder in blackboard.

- (6) Look over the materials you will need throughout the semester to perform your labs. An itinerary will be expected in the first lab. If anything is missing or broken, notify HOL **IMMEDIATELY.**