

WACO, TEXAS

AND INSTRUCTOR PLAN

Introductory Chemistry I
CHEM 1405.50

Raymond Kessler

NOTE: This is a 16-week course.

NOTE: This is a Blended/Hybrid course.

COVID 19 Notice:

McLennan Community College is committed to providing you with every resource you need to reach your academic goals. We are also concerned for your safety. We are working through COVID-19 guidelines to make sure we offer a safe environment for you and our faculty. This will include smaller class sizes to manage social distancing and proper cleaning techniques. You will have the advantage of a physical classroom experience but may also need to work part of the time online as we adjust to limited classroom capacity. This will also allow us the flexibility to move online if so directed by federal, state and/or local COVID 19 guidelines. Faculty and staff are preparing now to ensure that you have the best experience in the midst of these uncertain times.

COURSE NUMBER & SECTION NUMBER

Course Description:

Survey course introducing chemistry. Topics may include inorganic, organic, biochemistry, food/physiological chemistry, and environmental/consumer chemistry. Designed for allied health students and for students who are not science majors. Semester Hours 4 (3 lec/3 lab)

Prerequisites and/or Corequisites:

None

Course Notes and Instructor Recommendations:

Students need a computer that meets the system requirements with adequate internet access. Additionally, it is important to check Brightspace periodically for new assignments and/or announcements. If you have problems with either your hardware or software, it is still your responsibility to make sure that all assignments are turned in on time. Extensions of due dates will NOT be given due to failure of computer or internet access.

This is blended/hybrid course; thus, students are expected to be available for online and/or in person for the class time scheduled. It is recommended that the student attend class regularly, take adequate lecture notes, and study outside of class. Problems sets will require the student be knowledgeable of algebraic manipulation of symbolic equations. Assignments will be given for reading material in preparation for lecture and for homework assignments. It is vital that you read the text BEFORE the lecture on that chapter. This will greatly improve your understanding of the topic. Students are expected to spend between 3- 6 hours per week reading, watching screencast lectures and videos. A general recommendation is 2-3 hours per week of study time for every college credit hour taken.

Due to COVID-19, this is a very unusual semester. Here are some rules that you and I will follow. Failure to comply will result in your removal from the classroom.

- 1. Stay up to date about MCC COVID response by checking the COVID response link on the MCC homepage
- 2. Go through and follow the instructions in the self-assessment form each day before coming to campus.
- 3. Face coverings will be worn at all times. Gaiters are not recommended.
- 4. Social distancing of at least 6 feet will be maintained at all times, inside and outside the classroom.
- 5. You will have an assigned workspace in the classroom that you will use whenever we have a face to face (F2F) meeting.
- 6. You will wipe down your workspace at the beginning and end of class.
- 7. There will be no sharing of supplies.
- 8. Do not bring anyone to class with you.
- 9. No drinking or eating is allowed in the classroom.

COURSE NUMBER & SECTION NUMBER

Instructor Information:

Instructor Name: Raymond Kessler MCC Email: rkessler@mclennean.edu

Office Phone Number: Office Location: SB 309

Office/Teacher Conference Hours: available upon request

Other Instruction Information:

Required Text & Materials:

Title: Basic Chemistry

Author: Timberlake & Timberlake

Edition: 6th Ed. Publisher: Pearson ISBN: 9780134465517

Laboratory Manual: Chemistry 1405 Lab Manuel

Author: Robert D. Ford

MCC Publication

Mastering Chemistry access code. If you buy the textbook from the MCC bookstore, this code is part of the package. Please be aware that used or rented books will NOT have the required access code for Modified Mastering

You are required to have your own 'indirectly vented safety goggles' (available in the MCC Bookstore and from other sources).

Other material needed included: nonprogrammable scientific calculator, chemistry goggles available at MCC bookstore.

For your quizzes and/or exams, you will need to download and enable the Lockdown Browser software prior to accessing the assignment. This software is a FREE download. The purpose of this software is to ensure academic integrity. It will prevent you from accessing or opening other applications while completing your course assignments.

MCC Bookstore Website: http://www.mclennan.edu/bookstore/

Student Support/Resources:

MCC provides a variety of services to support student success in the classroom and in your academic pursuits to include counseling, tutors, technology help desk, advising, financial aid,

COURSE NUMBER & SECTION NUMBER

etc. A listing of these and the many other services available to our students is available at http://www.mclennan.edu/campus-resource-guide/

College personnel recognize that food, housing, and transportation are essential for student success. If you are having trouble securing these resources, we encourage you to contact a success coach by calling (254) 299-8226. Students can visit the Completion Center Monday-Friday from 8:00 a.m.-5:00 p.m. to meet with a success coach and receive additional resources and support to help reach academic and personal goals. Paulanne's Pantry (MCC's food pantry) is open 12:00 p.m.-1:00 p.m., Monday-Friday, without an appointment. The Completion Center and pantry are located on the Second Floor of the Student Services Center (SSC).

MCC Foundation Emergency Grant Fund:

Unanticipated expenses, such as car repairs, medical bills, housing, or job loss can affect us all. Should an unexpected expense arise, the MCC Foundation has an emergency grant fund that may be able to assist you. Please go to https://www.mclennan.edu/foundation/scholarships-and-resources/emergencygrant.html to find out more about the emergency grant. The application can be found https://www.mclennan.edu/foundation/docs/Emergency_Grant_Application.pdf).

Minimum Technical Skills:

Students should have basic computer skills, knowledge of word processing software, and a basic understanding of how to use search engines and common web browsers.

Backup Plan for Technology:

In the event MCC's technology systems are down, you will be contacted/notified through your MCC student email address. Please note that all assignments and activities will be due on the date specified in the Instructor Plan, unless otherwise noted by the instructor.

* Click Here for the Minimum System Requirements to Utilize MCC's D2L|Brightspace

(https://www.mclennan.edu/center-for-teaching-and-

learning/Faculty%20and%20Staff%20Commons/requirements.html)

Click on the link above for information on the minimum system requirements needed to reliably access your courses in MCC's D2L|Brightspace learning management system.

Email Policy:

McLennan Community College would like to remind you of the policy (http://www.mclennan.edu/employees/policy-manual/docs/E-XXXI-B.pdf) regarding college email. All students, faculty, and staff are encouraged to use their McLennan email addresses when conducting college business.

COURSE NUMBER & SECTION NUMBER

A student's McLennan email address is the preferred email address that college employees should use for official college information or business. Students are expected to read and, if needed, respond in a timely manner to college emails.

Instructional Uses of Email:

Faculty members can determine classroom use of email or electronic communications. Faculty should expect and encourage students to check the college email on a regular basis. Faculty should inform students in the course syllabus if another communication method is to be used and of any special or unusual expectations for electronic communications.

If a faculty member prefers not to communicate by email with her/his students, it should be reflected in the course syllabus and information should be provided for the preferred form of communication.

Email on Mobile Devices:

The College recommends that you set up your mobile device to receive McLennan emails.

Forwarding Emails:

You may forward the emails that come to your McLennan address to alternate email addresses; however, the College will not be held responsible for emails forwarded to an alternate address that may become lost or placed in junk or spam filters.

Methods of Teaching and Learning:

Lecture sessions followed by major examinations, outside assignment/checkups, lab exercises with report sheets/checkups and occasional bonus point opportunities. Lecture will be a combination of PowerPoint presentations, video problem sets, and discussion.

Lab sessions offer hands on experience in a laboratory environment. Virtual Labs consist if various activities and resources that will prepare the student to learn the required lab content for each topic. It is the responsibility of the student to read the lab before the lab session begins to maintain a safe working environment. Students will be required to work independently. To get credit for lab, the students must turn in a report or complete the activity and submit them on or before their due dates.

Course Objectives and/or Competencies:

A. To acquaint the student with the general principles of chemistry and the applications of chemistry to modern living.

COURSE NUMBER & SECTION NUMBER

- B. To help the student appreciate the development of this science and the importance of chemistry in society.
- C. To gain some understanding of chemical phenomena in the student's environment.
- D. To develop an adequate scientific vocabulary.
- E. To acquaint the student with the use of basic chemical manipulations, formulas, equations and problems both theoretically and practically.
- F. To acquaint the student with the use of some of the more common apparatus and methodology found and used in the routine chemistry laboratory and to demonstrate to the student that chemistry is a laboratory science.
- G. To aid the student in developing a well-rounded personality with a philosophy of good ideals.

Course Outline or Schedule:

Week	Date	Topic
1	Aug 24 -30	Orientation/Syllabus
		Chapter 1. Chemistry in Our Lives
		Chapter 2. Chemistry in Measurement
		Lab: Orientation/Check in/Safety
2	Aug 31 – Sept. 6	Chapter 2. Chemistry in Measurement
		Lab 1. Laboratory Techniques (in-house)
3	Sept. 7-13	Holiday
		Chapter 3. Matter and Energy
		No Lab
4	Sept. 14 - 20	Chapter 4. Atoms and Elements
		Lab 2. Measurement and Density (in-house)
5	Sept. 21 -27	Exam 1 (Chapters 1-4)
		Chapter 5: Electronic Structure of Atoms and Periodic Trends
		Lab 3. Changes; Substances (virtual)
6	Sept. 28 – Oct. 4	Chapter 5: Electronic Structure of Atoms and Periodic Trends
		Lab: Experiment 4. Flame Test (in house)
7	Oct. 5 - 11	Chapter 6: Ionic and Molecular Compounds
		Lab: Experiment 5. Electrolytes (virtual)
8	Oct. 12 - 18	Chapter 7: Chemical Quantities
		Lab: Experiment 6. Percentage Composition of a Compound (in-
		house)
9	Oct. 19 - 25	Exam 2: Chapter 5-7
		Chapter 8: Chemical Reactions
		Lab: Experiment 7. Water in Food (virtual)

COURSE NUMBER & SECTION NUMBER

10	Oct. 26 – Nov. 1	Chapter 8: Chemical Reactions
		Last day for student-initiated withdrawals
		Lab: Experiment 8. Hydrogen/check out (in person)
11	Nov. 2 - 8	Chapter 9: Chemical Quantities in Reactions
		Lab: Experiment 9. Ion-Combination (virtual)
12	Nov. 9 - 15	Chapter 10: Bonding and Properties of Solids and Liquids
		Lab: Experiment 13. Acids and Bases/Check-out (virtual)
13	Nov. 16 - 22	Exam 3: Chapters 8-10
		Chapter 11: Gases
14	Nov. 23 - 29	Chapter 11: Gases
		Thanksgiving
15	Nov. 30 – Dec. 6	Chapter 12 Acid/Bases
		•
16	Dec. 7	Final Exam

This schedule is subject to change. You will be informed of any changes to the syllabus by email, D2L Brightspace, or class announcements

Course Grading Information:

Your course grade will be based on the points received from the exams, the final, the lab grades, quizzes and the periodic homework

Exam: There will be an exam at the end of the discussion of each unit covered. The test date will be announced at least a week in advance. Exams will be given in class or online and must be completed during one regular class period. Work must be legible, and the final answer must be clearly indicated to receive credit. If special accommodations become necessary, arrangements must be made BEFORE the exam date. There are no makeup exams without prior arrangements. Students arriving late to class may not start an exam once the first person completes the exam and leaves the classroom. You may not leave the room during a test. During tests, there are no cell phones, or any other electronic devices allowed. You must use the periodic tables, and scratch paper supplied by the department. All tests will be comprehensive and may contain true/false, multiple choice, matching, completion, and short answer questions, as well as problem solving when applicable. The final exam is comprehensive, and there are no exemptions from taking the final. There will be no make-up test for the final exam.

Quizzes/Outside assignment: Quizzes may be given each lecture period during the first ten minutes of class or on Brightspee throughout the semester. Quizzes may cover problems/exercises assigned during previous class sessions. Quizzes cannot be made-up, but the lowest grade will be dropped. You may not leave the room during a quiz. If you are not in the

COURSE NUMBER & SECTION NUMBER

classroom when quizzes are passed out, you cannot take the quiz. Do not arrive tardy for class. Quizzes will be given after each lecture to aid the student in understanding the lecture.

Homework: Homework will be assigned for each chapter on the Mastering Pearson on-line platform. The homework assignment is designed to encourage students to keep up with the material, and master concepts evaluated on the exams. Homework is due on Sundays at 11:59 CST after completion of the chapter.

Lab Grades: You are encouraged to keep good report (answer) sheets during laboratory sessions. You will submit lab reports at the beginning of class when the next lab exercise is scheduled. Virtual lab reports are due the day of the lab before 11.59 pm CST. Labs cannot be made-up, but the lowest grade will be dropped. Failure to attend a lab will result in a lab grade of zero and a missed lab grade will not be dropped unless prior arrangements to miss that lab have been made. If two or more in person labs are missed, the final lab average grade will be zero at the end of the semester, regardless of the accumulated grade you have up to that point. In a laboratory setting, safety equipment must be worn at all times: long pants/skirt (covering at least the top half of the calf), apron or lab coat, hair back, safety goggles, and, if necessary, gloves. No open-toed shoes, shoes with holes in them, shoes that leave the top of the foot exposed, hats of any sort, shorts, food or drink are allowed. If a student is not dressed in the appropriate attire, that student cannot attend lab until the requirements are met. Any student who is not able to attend lab due to inappropriate attire will receive a zero grade for that assignment with no makeup or dropped grade for that assignment. Anyone acting in an unsafe manner will be warned once. If seen without safety equipment or acting improperly a second time, they will be asked to leave the laboratory. They will be allowed to return in 30 minutes to finish their work, if they can. If they are asked to leave more than once for any given experiment, they will receive a zero for that experiment's lab report. Safety is the MOST important part of lab. Students must abide by the general safety regulations as described in the chemistry 1405 laboratory manual.

Overall Grade: It is the students' responsibility to keep track of their overall grade based on Quizzes - 15%, Homework – 20%, Tests – 40%, and Lab – 25%. If you have trouble calculating your grade, you may ask to see your overall grade. Final grades are based on 90.00+=A, 80.00-89.99=B, 70.00-79.99=C, 60.00-69.99=D, and less than 60.00=F. Grades will not be released over the phone or by email.

Cheating of any kind will not be tolerated. If there is any evidence of cheating on any homework, quiz, test, or final, you will receive a zero for that item and cannot make it up or replace it and it cannot be dropped.

COURSE NUMBER & SECTION NUMBER

Late Work, Attendance, and Make Up Work Policies:

Late Work: A Make-up exams/quizzes will be given only with prior arrangements and must be taken immediately upon your return to class missed quiz/exam is recorded as a zero and may not be made up unless prior arrangements have been made. Make-up exams/quizzes will be given only with prior arrangements and must be taken immediately upon your return to class. If you arrive tardy and have missed too much of the pre-lab lecture (as determined by the instructor) you may not be allowed to begin the experiment. Please, arrive ON TIME to avoid a zero grade. If you do not complete the lab, you cannot turn in a lab report, and receive a zero grade for that lab. Students are responsible for checking the due date of all assignments. While I encourage you to come to me with questions about answers on assignments anytime, if you wish to dispute a grade or have a grade changed, you must contact me about it within two weeks of the assignment due date or there will be no change to the grade.

Attendance: A complete record of attendance will be maintained for the entire length of each course. Attendance in the blended class is based on the in-person attendance and completing of assignments online. It has been shown that students who attend class regularly have a higher success rate (read that as passing) than those who chose not to attend class. Each student is responsible for all material presented or assigned and will be held accountable for such materials. If a student's absences reach 25 % of the total contact hours in this course, the student must officially withdraw from the course in order to receive a W, before October 26th. After this date a student cannot drop the course. It is the student's responsibility to initiate the drop process if he/she decides not to complete the class. If this class is not dropped, then a letter grade will be assigned for the work completed. Students will be counted absent from the beginning of the first official day.

Student Behavioral Expectations or Conduct Policy:

If there is any evidence of cheating on any homework, quiz, test, or final exam, you will receive a zero for that item and cannot make it up or replace it and it cannot be dropped. The result of a second offence will be failing grade in the course. Furthermore, you could also face expulsion from MCC.

* Click Here for the MCC Academic Integrity Statement

(www.mclennan.edu/academic-integrity)

The link above will provide you with information about academic integrity, dishonesty, and cheating.

* Click Here for the MCC Attendance/Absences Policy

(https://www.mclennan.edu/highlander-guide/policies.html)

COURSE NUMBER & SECTION NUMBER

Click on the link above for the college policies on attendance and absences. Your instructor may have guidelines specific to this course.

Accommodations/ADA Statement

Any student who is a qualified individual with a disability may request reasonable accommodations to assist with providing equal access to educational opportunities. Students should contact the Accommodations Coordinator as soon as possible to provide documentation and make necessary arrangements. Once that process is completed, appropriate verification will be provided to the student and instructor. Please note that instructors are not required to provide classroom accommodations to students until appropriate verification has been provided by the Accommodations Coordinator. Instructors should not provide accommodations unless approved by the Accommodations Coordinator. For additional information, please visit mclennan.edu/disability.

Students with questions or who require assistance with disabilities involving physical, classroom, or testing accommodations should contact:

<u>disabilities@mclennan.edu</u> 254-299-8122 Room 319, Student Services Center

* Click Here for more information about Title IX

(www.mclennan.edu/titleix)

We care about your safety, and value an environment where students and instructors can successfully teach and learn together. If you or someone you know experiences unwelcomed behavior, we are here to help. Individuals who would like to report an incident of sexual misconduct are encouraged to immediately contact the Title IX Coordinator at titleix@mclennan.edu or by calling Dr. Drew Canham (Vice President for Student Success) at 299-8645. Individuals also may contact the MCC Police Department at 299-8911 or the MCC Student Counseling Center is a confidential resource for students. Any student or employee may report sexual harassment anonymously by visiting the following website: http://www.lighthouse-services.com/mclennan/.

McLennan's Title IX webpage (http://www.mclennan.edu/titleix/) contains more information about definitions, reporting, confidentiality, resources, and what to do if you or someone you know is a victim of sexual misconduct, gender-based violence or the crimes of rape, acquaintance rape, sexual assault, sexual harassment, stalking, dating violence or domestic violence.

COURSE NUMBER & SECTION NUMBER

