



WACO, TEXAS

**COURSE SYLLABUS
AND
INSTRUCTOR PLAN**

Introductory Chemistry I

CHEM 1405 03

Raymond Kessler

NOTE: This is a 16-week course.

COVID 19 Notice:

McLennan Community College is committed to providing you with every resource you need to reach your academic goals including your safety. We will continue to monitor the evolving situation with COVID 19 and adjust our safety guidelines to make sure we offer a safe environment for you and our faculty. Please make sure to consult your faculty and the MCC website at <https://www.mclennan.edu/crisis-management/coronavirus-updates/index.html> on any changes to these guidelines.

Introductory Chemistry I

CHEM 1405 03

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:

The syllabus, class calendar, lecture materials, quizzes, grades, and other information will be posted on D2L Brightspace. Additionally, it is important to check D2LBrightspace periodically for new assignments and/or announcements. If you have problems with either your computer 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. If you cannot access D2L Brightspace from home, MCC has available computers across campus.

This is not a blended/hybrid course; thus, students are expected to be available 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.

Contact your instructor if you have any questions about the course, or questions about the material covered. Contact your instructor immediately if you have any problems (personal, technical. etc.) that prevent you from completing your class responsibilities by the deadline. Please use your MCC e-mail account when contacting me. Include a brief description of the purpose of your email. Include your whole name and the course name in the subject line.

Due to the uncertainty of COVID-19, here are some guidelines 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. <https://www.mclennan.edu/crisis-management/coronavirus-updates/index.html>
 2. Go through and follow the instructions in the self-assessment form each day before coming to campus.
 3. You may have an assigned workspace in the classroom and the laboratory
 4. If necessary, you will wipe down your workspace at the beginning and end of class.
 5. Do not bring anyone to class with you.
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Introductory Chemistry I

CHEM 1405 03

6. No drinking or eating is allowed in the classroom or laboratory.

Instructor Information:

Instructor Name: Raymond Kessler

MCC Email: rkessler@mclennan.edu

Office Phone Number: 254-299-8184

Office Location: FO 207

Office Hours: Tuesdays and Thursdays: 8:30 am – 9:30 am. Wednesday: 8:30 am – 9:30 am.

Friday by appointments only

Other Instruction Information: The best way to reach me is through email. I will try to respond to email within 24-36 hours weekdays. It may or may not take longer during weekends or holidays.

In person or Zoom meetings can also be scheduled by appointment only.

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 (includes log button), available at MCC bookstore and other locations

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/>

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. You are required to use Brightspace and the Pearson Mastering Chemistry online platform for this course.

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.

All lessons including PowerPoint slides, quizzes, lab updates, and supplemental videos/homework are available in D2L Brightspace. All homework assignments will be posted in Mastering Chemistry. Problems sets will require the student be knowledgeable of algebraic manipulation of symbolic equations. It is important that students keep up with material and devote adequate time outside the classroom to study. If any material is unclear, it is recommended to seek guidance as soon as possible. You are responsible for all material covered in the text (unless otherwise stated), even if it is not covered in lecture.

Lab sessions offer hands on experience in a laboratory environment. It is the responsibility of the student to read the lab before the lab session begins to maintain a safe working environment. Students may be required to work independently or as a group. 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:

Critical Thinking (CT): to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information.

- A. *Students' critical thinking abilities will be assessed through exam questions and laboratory experiments and reports.*

Communication (COMM): to include effective development, interpretation and expression of ideas through written, oral and visual communication.

- B. *Students will be assessed through formal or informal presentation of a topic relevant to the semester's course work and laboratory reports.*

Empirical/Quantitative (EQS): to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions.

- C. *Students will be required to perform chemistry calculations on exams, during weekly assignments and in laboratory experiments.*
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Introductory Chemistry I

CHEM 1405 03

Teamwork (TEAM): to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal.

D. *Students will work in teams for some laboratory experiments. Each member of the team will carry some responsibility for data collection and/or interpretation.*

Learning Objectives:

1. To acquaint the student with the general principles of chemistry and the applications of chemistry to modern living.
2. To help the student appreciate the development of this science and the importance of chemistry in society.
3. To gain some understanding of chemical phenomena in the student's environment.
4. To develop an adequate scientific vocabulary.
5. To acquaint the student with the use of basic chemical manipulations, formulas, equations and problems – both theoretically and practically.
6. 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.
7. To aid the student in developing a well-rounded personality with a philosophy of good ideals.

Course Outline or Schedule:

We ek	Date	Topic	Assignments Due @ 11:59 pm
1	8/22-8/28	Orientation/Syllabus Chapter 1. <i>Chemistry in Our Lives</i> Chapter 2. Chemistry in Measurement	Hw 1, Q 1 <i>Due Mon 8/29</i>
		<i>Lab: Orientation/Check in/Safety</i>	<i>Lab safety</i> <i>Due Mon 8/29</i>
2	8/29-9/4	Chapter 2. Chemistry in Measurement	HW 2, Q 2 <i>Due Sun 9/4</i>
		<i>Lab: Experiment 1. Laboratory Techniques</i>	
3	9/5-9/11	Labor Day & Chapter 3. Matter and Energy	HW 3, Q 3 <i>Due Sun 9/11</i>
		<i>No Lab</i>	
4	9/12-9/18	Chapter 4. Atoms and Elements	HW 4, Q 4 <i>Due Sun 9/18</i>
		<i>Experiment 2. Measurement and Density</i>	

Introductory Chemistry I

CHEM 1405 03

5	9/19-9/25	Review & Exam 1: Chapters 1-4	<i>Exam Wed 9/21</i>
		<i>Experiment 3. Changes; Substances</i>	
6	9/26-10/2	Chapter 5: Electronic Structure of Atoms and Periodic	HW 5, Q 5 <i>Due Sun 10/2</i>
		<i>Lab: Experiment 4. Water in Food</i>	
7	10/3-10/9	Chapter 6: Ionic and Molecular Compounds	HW 6, Q 6 <i>Due Sun 10/9</i>
		<i>Lab: Experiment 5. Flame Test</i>	
8	10/10-10/16	Chapter 7: Chemical Quantities	HW 7, Q 7 <i>Due Sun 10/16</i>
		<i>Lab: Experiment 6. Electrolytes</i>	
9	10/17-10/23	Review & Exam 2: Chapter 5-7	Exam Wed 10/19
		<i>Experiment 7. Percentage Composition of a Compound (MgO)</i>	
10	10/24-10/30	Chapter 8: Chemical Reactions Last day for student-initiated withdrawals 10/25	HW 8, Q 8 & <i>Due Sun 10/30</i>
		<i>Lab: Experiment 8. Oxygen</i>	
11	10/31-11/6	Chapter 9: Chemical Quantities in Reactions	HW 9, Q 9 <i>Due Sun 11/6</i>
		<i>Lab: Experiment 9. Hydrogen</i>	
12	11/7-11/13	Chapter 10: Bonding and Properties of Solids and Liquids	HW 10, Q 10 <i>Due Sun 11/13</i>
		<i>Lab: Experiment 10. Ion-Combination</i>	
13	11/14-11/20	Review & Exam 3: Chapters 8-10	<i>Exam Wed 4/13</i>
		<i>Lab: Experiment 11. Percentage Composition of a Mixture</i>	
14	11/21-11/27	Chapter 12: Solutions Thanksgiving Holiday 11/23-11/26	
		<i>Lab: Experiment 12. Acids and Bases/Check-out</i>	
15	11/28-12/4	Chapter 12: Solutions	HW 12, Q 12 <i>Due Sun 12/4</i>
16	12/7	Final Exam Wednesday 9:35 – 11:00 am	

This schedule is subject to change. Due to the uncertainty of COVID-19 the schedule and meeting format (Face-to-Face, ZOOM, or online) may change. You will be informed of any changes to the syllabus by email, D2L Brightspace, or class announcements.

Introductory Chemistry I

CHEM 1405 03

Course Grading Information:

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

Exam: There will be four 100-point exams for the course. Exams will be given in class 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, and additional time will not be given. 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, with a focus on recent material covered, 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. If you are a graduating student, you MUST take the final exam on Monday or Tuesday the week of finals.

Quizzes/Outside assignment: Quizzes may be given each lecture period during the first ten minutes of class or on Brightspace 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. Quizzes will be given after each chapter to aid the student in understanding the lecture. You are expected to comply with the MCC academic Integrity Statement when completing quizzes. Online quizzes are due on Sundays at 11:59 CST after completion of the chapter.

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. You are expected to comply with the MCC academic Integrity Statement when completing homework assignments. 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/activities at the end of each lab. Labs/activities cannot be made-up, but the lowest two lab grades 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 more than 2 labs are missed due to extenuating circumstances, an alternate assignment, could be but not limited to a research paper, presentation or laboratory exam, will be offered.

Introductory Chemistry I

CHEM 1405 03

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 make-up 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%, Exams - 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. Work must be legible, or it will not be graded. If you wish to dispute your grade, please contact the instructor within one week.

Cheating of any kind will not be tolerated. If there is any evidence of cheating or plagiarizing 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. Student Discipline/Student Development may take additional action.

Anyone caught cheating or plagiarizing on any assignment will have grounds to fail the course for the semester and be reported to the disciplinary council. Cheating may include, but not limited to sharing assignments or test answers, collusion, having someone else do your assignment, posting information for the class on websites like Chegg, Slate and other similar sites.

Late Work, Attendance, and Make Up Work Policies:

Late Work: Make-up exams/quizzes will be given only with prior arrangements and must be taken within one week 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. Documentation of the extenuating circumstances will be required. 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 one week 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 will be taken for laboratory and the lecture. 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. Extensions will not be allowed. In case of remote learning, attendance will be based on 2 assignments (homework, quiz, lab) completed each week. If a student's absences reach 25 % of the total contact hours in this course, this will be taken as evidence the student does not intend to complete the course, and the student will be withdrawn from the course with a W. The student must officially withdraw from the course in order to receive a W before Oct. 25. 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.

Students will be permitted to make up class work and assignments missed due to absences caused by (1) authorized participation in official College functions, (2) personal illness, (3) an illness or a death in the immediate family or (4) the observance of a religious holy day. Also, the instructor has the right of determining whether a student may make up work missed due to absences for other reasons. It is the student's responsibility to inform the instructor of the reason for an absence and to do so in a timely fashion.

Student Behavioral Expectations or Conduct Policy:

"Students are expected to maintain classroom decorum that includes respect for other students and the instructor, prompt and regular attendance, and an attitude that seeks to take full advantage of the education opportunity."

Each student is expected to behave in a civil and respectful manner toward the instructor and other students in all forms of communication. Infractions will not be tolerated. Failure to comply will be grounds for dismissal from the class and name submitted to Students Discipline.

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

Introductory Chemistry I

CHEM 1405 03

second offence will be failing grade in the course. Furthermore, you could also face expulsion from MCC.

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. 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. 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

[Click Here for the MCC Attendance/Absences Policy](https://www.mclennan.edu/highlander-guide/policies.html)

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

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



ACADEMIC RESOURCES/POLICIES

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. For additional information, please visit www.mclennan.edu/disability.

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

disabilities@mclennan.edu

254-299-8122

Room 319, Student Services Center

Title IX:

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 (Chief of Staff for Diversity, Equity & Inclusion/Title IX) at (254) 299-8645. Individuals also may contact the MCC Police Department at 299-8911 or the MCC Student Counseling Center at MCC at (254) 299-8210. The MCC Student Counseling Center is a confidential resource for students. Any student or employee may report sexual harassment anonymously by visiting <http://www.lighthouse-services.com/mclennan/>.

Go to McLennan's Title IX webpage at www.mclennan.edu/titleix/. It 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.

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, 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 or want to explore strategies for balancing life and school, we encourage you to contact a Success Coach by calling (254) 299-8226 or emailing SuccessCoach@mclennan.edu. Students may visit the Completion Center Monday-Friday from 8 a.m.-5 p.m. to schedule a meeting with a Success Coach and receive additional resources and support to help reach academic and personal goals. Paulanne's Pantry (MCC's food pantry) provides free food by appointment to students, faculty and staff based on household size. Text (254) 870-7573 to schedule a pantry 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 at https://www.mclennan.edu/foundation/docs/Emergency_Grant_Application.pdf.

MCC Academic Integrity Statement:

Go to www.mclennan.edu/academic-integrity for information about academic integrity, dishonesty, and cheating.

Minimum System Requirements to Utilize MCC's D2L|Brightspace:

Go to <https://www.mclennan.edu/center-for-teaching-and-learning/Faculty-and-Staff-Commons/requirements.html> for information on the minimum system requirements needed to reliably access your courses in MCC's D2L|Brightspace learning management system.

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 notified via 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.

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.

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. For more information about your student email account, go to www.mclennan.edu/student-email.

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 their 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. If you need assistance with set-up, you may email Helpdesk@mclennan.edu for help.

You can find help on the McLennan website about connecting your McLennan email account to your mobile device:

- [Email Setup for iPhones and iPads](https://support.microsoft.com/en-us/office/set-up-an-outlook-account-in-the-ios-mail-app-b2de2161-cc1d-49ef-9ef9-81acd1c8e234?ui=en-us&rs=en-us&ad=us) (<https://support.microsoft.com/en-us/office/set-up-an-outlook-account-in-the-ios-mail-app-b2de2161-cc1d-49ef-9ef9-81acd1c8e234?ui=en-us&rs=en-us&ad=us>)
- [Email Setup for Androids](https://support.microsoft.com/en-us/office/set-up-email-in-android-email-app-71147974-7aca-491b-978a-ab15e360434c?ui=en-us&rs=en-us&ad=us) (<https://support.microsoft.com/en-us/office/set-up-email-in-android-email-app-71147974-7aca-491b-978a-ab15e360434c?ui=en-us&rs=en-us&ad=us>)

Forwarding Emails:

You may forward 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 be lost or placed in junk or spam filters.

For more helpful information about technology at MCC, go to [MCC's Tech Support Cheat Sheet](#) or email helpdesk@mclennan.edu.

Disclaimer:

The resources and policies listed above are merely for informational purposes and are subject to change without notice or obligation. The College reserves the right to change policies and other requirements in compliance with State and Federal laws. The provisions of this document do not constitute a contract.