Introductory Chemistry-Allied Health
CHEM 1405
Fall 2020

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Office Hours: Monday thru Friday 7:30 to 8:00 or 3:30-4:00 in Room 503, our chemistry classroom.

Textbooks: *Chemistry- The Central Science and accompanying Laboratory Text.*

Homework assigned throughout this course will have two sources: problems assigned by the instructor at the end of each chapter; and thru Mastering Chemistry an online, interactive teaching tool that can be accessed at www.masteringchemistry.com. If you are not already enrolled in Mastering Chemistry you will need to self-enroll using the instructions in the Student Access Code Card you purchased with your textbook. It contains your one time only registration code for new students. You will also need the course code listed below.

The class key for CHEM 1405 is __kyle39884_____

Of importance, several copies of the full solutions manual for all of the problems in the text are available on reserve in the library at the check-out desk. The questions and exercises found in our text are very similar but not identical to the online homework in Mastering Chemistry.

ISBN Numbers: 0321693450 (text) and 0136055478 (lab manual)

Please remember to bring your textbook and a scientific calculator to all classes. Purchase of a simple scientific calculator (cost $8 to $15) is required. Use of graphing calculators and other calculators with extensive memories are not allowed on exams or quizzes unless all programs and memory has been cleared by me. Cell phone calculators are also not allowed. Purchase of a three ring binder for storing handouts, exams, quizzes and homework is recommended.

Objectives: The primary objective of this course is to introduce you to the science of chemistry. More specifically, we will learn about measurement, matter and energy, atoms and atomic structure, chemical bonding, molecules and compounds, chemical reactions of various sorts, gases, solutions, acids and bases, and other related subjects. In all, we will cover nearly all of the material in the first seven chapters in our text excluding sections 5.6, 5.7, and possibly some sections in Chapter 6. Selected parts of Chapter 8 on acids and bases will also be covered. More detail can be found by examining the Table of Contents in the text.
This course is designed to meet the needs of the following students:
1. Students planning a career in an allied health field such as nursing or dental hygiene.

2. Students seeking a bachelor's degree in a non-scientific field. This course may be applied toward the bachelor's degree in fields such as education, business, the humanities, etc.
3. Students planning to take General Chemistry who have not had high school chemistry or need a refresher course before taking General Chemistry.

Student Learning Outcomes:

1. Students will develop a familiarity with the metric system and demonstrate the ability to carry out conversion problems including dosage problems, nutritional calculations and temperature conversions.
2. Students will demonstrate an understanding of atomic theory, and be able to use the octet rule and VSEPR theory to predict chemical formulas and structures.
3. Students will be able to use simple chemical nomenclature, write and balance chemical equations, recognize reaction types, and understand the factors that influence reaction rate.
4. Students will be able to work simple gas law problems; and gain an understanding of concepts associated with solutions such as electrolytes and nonelectrolytes, solubility and equivalents, and acids and bases
5. Students will learn about environmental issues relevant to their lives such as global warming, air pollution, and acid rain.
6. Students will demonstrate competence in the laboratory including the ability to carry out simple experiments in a safe and efficient manner.

State of Texas Assessment Goals, Campus Smoking Policy, and ADA Statement:
The state of Texas has established the following assessment goals for the lecture and laboratory portions of this course:

EEO 1: To understand and apply method and appropriate technology to the study of natural sciences.
EEO 2: To recognize scientific and quantitative methods and the differences between these approaches and other methods of inquiry and to communicate findings, analyses, and interpretation both orally and in writing.
EEO 3: To identify and recognize the differences among competing scientific theories.
EEO 4: To demonstrate knowledge of the major issues and problems facing modern science, including issues that touch upon ethics, values, and public policies.
EEO 5: To demonstrate knowledge of the interdependence of science and technology and their influence on, and contribution to, modern culture.

NTCC has established the following policy regarding the use of tobacco products on campus:

> The use of tobacco products including smokeless tobacco, smoking tobacco, and any legal smoking preparation is prohibited in all College buildings, enclosed facilities, inner campus, and College owned vehicles.

Tobacco use is prohibited in:

1. All enclosed buildings and facilities, including but not limited to, classrooms, offices, food service areas, lavatories and residence halls.
2. All exterior areas in the inner campus and parking lots.
3. All college owned vehicles.

Tobacco use is permitted in:
1. Personal vehicles.
2. Designated smoking huts on the west side of campus.

Northeast Texas Community College has established the following policy in accord with the Americans with Disabilities Act:

It is the policy of Northeast Texas Community College to provide reasonable accommodations for qualified individuals who are students with disabilities. This College will adhere to all applicable federal, state and local laws, regulations and guidelines with respect to providing reasonable accommodations as required to afford equal educational opportunity. It is the student's responsibility to arrange an appointment with a College counselor to obtain a Request for Accommodations form. For more information, please refer to the Northeast Texas Community College Catalog or Student Handbook.

CONDUCT OF THE COURSE:

Attendance: You are expected to attend all classes. Chemistry is too hard to learn on your own. Some lecture material not found in the text will be presented during the semester and will show up on exams.

Classroom Behavior: Questions and/or observations are encouraged during the class period. Courteous and attentive behavior is always expected. Students who consistently misbehave can expect to have their grade lowered.
Students are expected to complete course work in an honest manner, using their intellects and resources designated as allowable by the course instructor. This course will follow the NTCC Academic Honesty policy stated in the Student Handbook.
Anyone caught cheating or helping others to cheat on an exam or quiz will receive an immediate zero for that exam or quiz plus other penalties assessed at the discretion of the instructor. Dismissal from the course and expulsion from the College may also occur depending on past history.

Homework: We will be making extensive use of MasteringChemistry described above. Once submitted, MasteringChemistry homework is automatically graded and results are displayed. MasteringChemistry homework must be submitted prior to the cut off time listed with each assignment.

In addition, since MasteringChemistry does not cover everything in this course, additional homework drawn from in-chapter and end-of-chapter questions, will be assigned as we

proceed through each chapter. It is also a very good idea to do Study Checks, located at the end of each Sample Problem, as you read through each chapter since this will help you determine if you understand the material.

Answers for all Study Checks and all odd-numbered in-chapter and end-of-chapter problems can be found at the back of each chapter. A useful glossary of Key Terms can also be found near the end of each chapter. As stated above, complete answers to all of the exercises in the text can be found on reserve in the library. Homework assignments drawn from the text will not be graded but students who wish to turn in homework for assessment and comment are welcome to do so.

You **MUST** do the homework to be successful in this course. It is equally important to keep up with the course. For example, waiting until the weekend to "catch up" and study for an exam on Monday does not work for most students. In general, you should plan to spend a minimum of 1 1/2 hours of study for every 1-hour of lecture.

Quizzes and Exams: A quiz will be given at the beginning of many lectures. Quizzes will be based on homework assignments and lectures. Students who are late for class will not be allowed to take a quiz and will be assigned a grade of zero.

Three regular exams will be given during the semester on the following dates:

Exam 1 TBA
Exam 2 TBA
Exam 3 TBA
Final Exam

If you miss a regular exam for a legitimate reason, you are responsible for making me aware of that reason as soon as possible. If the reason for missing the exam is found to be acceptable, the points allotted to the missed exam will be added to the Final Exam.
You will need a reliable scientific calculator for exams and quizzes. Sharing calculators will not be permitted.

The comprehensive **Final Exam** will be given on the following dates:

CHEM1405.

The Final Exam will also include material covered after the third exam.

Laboratory: The laboratory portion of this course is taken up in a separate syllabus. Laboratory experiments support the lecture portion of this course by teaching skills and by providing direct hands-on experience with some of the concepts covered in lecture.

Evaluation:

Regular Exams	300 pts.
MasteringChem /Homework	250 pts.

Laboratory	250 pts.
Final Exam	200 pts.
	1000 pts.

Grading Scale:
A 1000-900 pts.
B 899-800 pts.
C 799-700 pts.
D 699-600 pts.
F <599 pts.

Extra Credit: A maximum of 20 points extra credit will be available for community service work. In addition, extra credit questions, drawn from supplementary material to be assigned in class, will be found at the end of each exam including the Final Exam. Exam extra credit will generally be worth 10% of the point count on each exam.

Withdrawal: September 9th is the last day for student-initiated withdrawal. If you are doing poorly in the course and wish to withdraw, you must do so by that date. If circumstances cause you to stop attending classes, then you must still officially withdraw or expect to receive an F in the course. Students who withdraw from the lecture must also withdraw from the lab.

In addition, the instructor may withdraw a student from the course if the student fails to attend three consecutive lectures.

Classroom Expectations and Tips for Success

Like all colleges, Northeast Texas Community College strives to be a "community of scholars." Please remember that you and all of the students in this class are pursuing very important goals in your lives. As human beings and as scholars, I expect every student to be courteous and considerate toward other students throughout the lecture and laboratory portions of this course.

As your instructor, I will attend all classes on time and prepared to teach what you are expected to learn each day. I will make a conscientious effort each class period to teach to the best of my ability and to provide you with clear, well-organized explanations of class material. I am concerned about your learning experience and your success in this course. However, that ultimate success does depend largely on **YOU**. Your success can be maximized and your potential achieved by making a commitment to meet the following classroom expectations:

A. Attend ALL classes – physically and mentally. Wherever you are, be **all** there.

B. Be on time for class. Attitude is not everything but it is very important.

Remain in class for the entire instructional period.

C. Be an active learner – participate in class. Be attentive, answer questions and ask questions. Smile, be interested, and act as if you care. (OK, I'll admit that occasionally thing get a little boring; work through that boredom by participating!)

D. Read ahead. This will help make the next lecture much more effective.

E. A good student acts like a good student, which includes not sleeping in class, not talking in class, and not reading unrelated material or doing other work in class. All cellular phones must be turned off during class time.

F. Realize that I do not GIVE grades. You EARN grades based upon your performance. That performance includes turning all assignments in on time. You shouldn't expect less of me because of my other commitments. I don't expect less of you because of your other commitments.

G. Be respectful of yourself, your classmates, and your instructors.

H. Learning is hard work but it is also invigorating and fun. Work hard and have fun doing so.

*(You can add this paragraph before the required textbook information. If you are using a Pearson Product you can indicate that the **MasteringChemistry Access Code** is included))*

Inclusive Access: We have negotiated with the Publisher to obtain a discounted price for your lecture course materials. Your eBook and **Connect Access Code** are included with your tuition and will be available through Blackboard on the first class day (use the link found on the Bb course homepage). The materials are required for your class and essential in your success. If you also determine that you would like a print copy of your text in addition to your inclusive access loose-leaf copies will be available in the College Store at a discounted price. You may opt out of purchasing your materials from the College Store through the Census Date for the course. If you choose to opt out you will be responsible for purchasing your Connect Access Code from another vendor. You will receive a refund for the Inclusive Access if you opt out.

(You may adjust these requirements to fit your course)

Minimum Technology Requirements:
Laptop or computer with webcam
Access to high speed daily internet
Microsoft Office 365 (available as a free download for all NTCC students)
Calculator such as TI-30Xa or equivalent. No programmable calculators or cell phones are allowed on exams.

Required Computer Literacy Skills:

Ability to use a web browser to access NTCC Blackboard System for course information, eBook and Proctorio assignments
Ability to access NTCC student email system and communicate professionally and competently with instructor
Ability to create and complete Word documents, save on your computer and upload into Bb assignment links

Core Curriculum Purpose and Objectives:
Through the core curriculum, students will gain a foundation of knowledge of human cultures and the physical and natural world; develop principles of personal and social responsibility for living in a diverse world; and advance intellectual and practical skills that are essential for all learning. Courses in the foundation area of life and physical sciences focus on describing, explaining, and predicting natural phenomena using the scientific method. Courses involve the understanding of interactions among natural phenomena and the implications of scientific principles on the physical world and on human experiences.

(The following can be added before the Student Learning Outcomes section)

College Student Learning Outcomes:
Critical Thinking Skills
CT.1
Students will demonstrate the ability to 1) analyze complex issues, 2) synthesize information, and 3) evaluate the logic, validity, and relevance of data.
Communication Skills
CS.1
Students will effectively develop, interpret and express ideas through written communication.
Empirical and Quantitative Skills
EQS.1
Students will manipulate numerical data or observable facts by organizing and converting relevant information into mathematical or empirical form.
EQS.2
Students will analyze numerical data or observable facts by processing information with correct calculations, explicit notations, and appropriate technology.
Team Work
TW2. Students will work with others to support and accomplish a shared goal.

(Include these paragraphs before the Academic Honesty Policy Statement)

Alternate Operations During Campus Closure and/or Alternate Course Delivery Requirements
In the event of an emergency or announced campus closure due to a natural disaster or pandemic, it may be necessary for Northeast Texas Community College to move to altered operations. During this time, Northeast Texas Community College may opt to continue delivery of instruction through methods that include, but are not limited to, online through the Blackboard Learning Management System, online conferencing, email messaging, and/or an alternate schedule. It is the responsibility of the student to monitor NTCC's website (http://www.ntcc.edu/) for instructions about continuing courses remotely, Blackboard for each class for course-specific communication, and NTCC email for important general information.

Additionally, there may be instances where a course may not be able to be continued in the same delivery format as it originates (face-to-face, fully online, live remote, or hybrid). Should this be the case, every effort will be made to continue instruction in an alternative delivery format. Students will be informed of any changes of this nature through email messaging and/or the Blackboard course site.

I've also attached a 2 page document describing the use of Proctorio that you might want to include. I don't think you would have to put ALL of this information directly in the syllabus but you could reference it and direct students to read the entire document if you post it in Bb in the "Start Here" folder.

Please don't hesitate to contact me through email or text or phone with any questions or concerns that you have about this semester. I forgot to mention that if you have any questions at all about NTCC's COVID response you can send an email to: covidresponse@ntcc.edu

If you are on the campus, know that there are very detailed and specific cleaning protocols in place. Masks are required in all public spaces at all times and are required in the classroom if the instructor indicates such (which is what I intend to do). The plant services department takes the job of sanitation of our facilities very seriously and with high priority.

Share recording with viewers:
https://ntcc.zoom.us/rec/share/vOkvBrvr1V1La52V41r9a_cGF6HPeaa80CNK-aYJz07a-qgKYzSeIKgnAhXoal9v