

Fall 2016

Chemistry 1360 Syllabus

Instructor: Sammer M. Tekarli, Ph.D.

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Office Hours: I am on campus from 4:00pm – 6:00pm on Thursdays. I will be more than happy to answer questions anytime that I am not busy with someone else.

Course Title: Context of Chemistry

Course Number: CHEM 1360.501

Course Description: 3 hours. Fundamentals of chemistry for students who are not science majors. Applications of chemistry to its role in the world. Topics include historical and philosophical development of modern chemistry, the environment, energy, industrial and economic development, modern materials, popular perspectives of chemistry. May not be counted toward a major or minor in chemistry. May be used to satisfy a portion of the Natural Sciences requirement of the University Core Curriculum.

Class Location: UNT – Frisco – Room 128

Class Meeting Times: Tuesday and Thursday from 06:30 pm–07:50 pm

Textbook: Chemistry For Changing Times, 14th Edition, John W. Hill; Terry W. McCreary; To help the student, supplementary class notes will be available on blackboard. Three purchase options available through UNT bookstore or www.mypearsonstore.com

- Textbook + MasteringChemistry + ebook: ISBN-13: 9780134196091
- Binder-Ready Textbook + MasteringChemistry + ebook: ISBN-13: 9780134172484
- MasteringChemistry with ebook: ISBN-13: 9780133923117

Tutoring: The UNT Learning Center offers six types of tutoring to meet your needs: One-on-One Tutoring, Online Tutoring, Drop-In Tutoring, Group Tutoring, Supplemental Instruction, E² Tutoring. For more information, visit <http://learningcenter.unt.edu/tutoring>

Grading Policy:

Exams (3 exams, 1 final)	100 points each	400 points
Homework	10 points each	100 points
Quizzes	10 points each	100 points
Attendance		100 points

Letter grades will be based upon the following grading scale:

90 – 100 % of the total points	630 – 700 Points	Grade = A
80 – 89 % of the total points	560 – 629 Points	Grade = B
70 – 79 % of the total points	490 – 559 Points	Grade = C
60 – 69 % of the total points	420 – 489 Points	Grade = D
Below 60 %	0 – 419 Points	Grade = F

Exams: three exams will be given during the course of the semester. Each exam will consist of multiple-choice questions and will be closed book. The exam will be administered during the regular class meeting.

Final Exam: a closed book comprehensive exam which will consist of all the material covered in the class during the entire semester and is mandatory. Missing the final exam will result in a score of zero. However, if the score on the final exam is higher than the lowest midterm exam score, then it will replace lowest exam score.

Homework: Homework will be assigned on MasteringChemistry online. The lowest homework grade will be dropped. Each homework assignment is worth 10 points.

Quizzes: Quizzes will be based on the homework questions and the material covered in the lectures. Quizzes can be in any format: in class, online, or take home. The lowest quiz grade will be dropped. There will be no make-up quizzes. Each quiz is worth 10 points

Attendance: Attendance grade will be assessed based on the participation and physical presence from the beginning to the end of each meeting time. The student will need to sign-in their name on an attendance sheet at the beginning of each class period and must participate in in-class team based assignments when administered. Attendance grade will be assessed as the percent of meetings attended.

There will be no curving of the grades. However, the professor reserves the right to alter the above grading scale to reflect student / class achievement accurately and fairly. Please remember that grades represent the accumulation of your performance during the semester not as your potential as a person or a student. Grades are non-negotiable.

Graded work and discussion of your grades:

Every effort will be made by the professor to return any graded work by the next class meeting. If you have any question about your grade on a particular Homework, Quiz, or Exam, or any other question related to your grades, please discuss it with the professor in person (either during office hours or at a mutually decided convenient time). This is for your own privacy.

You have a week from the time that a particular graded Exam is returned to discuss any grading issues on that particular assignment. After that time, the grade will stay unchanged. Exam Grades will be regularly posted on Blackboard. Please bring any clerical errors to my attention at the earliest. These clerical errors will be fixed at any time.

Rules on Incomplete Grade:

The University does have very strict rules concerning “Incomplete” grade. The incomplete grade is given only during the last one-fourth of a term/semester, and only if a student: (1) gives notice to the instructor of being required to participate in active military service: or (2) is passing the course and has justifiable reason why the work cannot be completed on schedule. Grades of incomplete are not to be used as a substitute for “F”. The rules governing “Incomplete” are explained in greater detail in the UNT Undergraduate Catalog.

Communication:

It is the student’s responsibility to check their UNT e-mail, Blackboard and Mastering Chemistry daily for any posted assignments, homework, or announcements.

The Blackboard for this class holds power point slides may include other materials presented during lecture.

Ground Rules:

Try to be on time. If you happen to be late, please enter the classroom without causing any disturbance. In case you have to leave early, you may do so quietly. Please turn off all electronic equipment when in class. You may leave the cell phone on vibrate mode if you are expecting an important phone call and attend the call by excusing yourself quietly. Please do not disrupt the class in any way.

The professor reserves the right to ask you to leave the room if it was decided that you are a distraction to the professor and others in the class.

A command of basic algebra is assumed, expected and required. You must have a calculator that gets you into scientific notation, logarithms, and inverse logs. Programmable calculators will not be allowed for in class or final exams.

Class Policies:

- Pay close attention to assignment instructions and daily due dates. Students are required to check their UNT email, Blackboard, and Mastering Chemistry often for any posted assignments, homework, or announcements.
- Cell phones and/or pagers need to be turned off during the class period. No texting is allowed during the class period.
- You will not be allowed to use your laptops during the class period not even to take notes. Electronic recording of lectures is permitted only with instructor permission
- **Disruption of Class:** disruption of classes is forbidden by the Student Code of Conduct and will result in dismissal of the student from the classroom. Disruption of classes includes, but is not limited to, horseplay, chatting socially, noisy or other offensive behavior that is disturbing to fellow classmates, and operation of cell phones or electronic devices or earphones. Lectures begin punctually, and acceptable classroom behavior is expected to begin punctually as well. Repeated late arrival of a student is considered to be unacceptable behavior.
- **Missed Classes:** students are responsible for the material that is covered in the class lecture. Should a student miss a lecture, it is the student's responsibility to get the lecture notes from other students.

Exam Policies

- No make-up exams will be given without prior approval. There is no make up for the final exam.
- A student missing a test will be given a zero, except for the following four reasons, in which case the student may be given the chance for a make-up test. Acceptable reasons for missing a test are:
 - Illness (requires documentation - a physician's note including contact information)
 - Death/serious illness of a family member (requires documentation - an obituary with contact information)
 - An official College activity (requires documentation - advanced approval from College with contact information)
 - College closing (general official announcement from the administration)
 - "Personal reasons" or "over-sleeping" do not constitute bona fide emergencies.
- During the exam time, the student is not allowed to leave the classroom for any reason unless they are done with the exam. If the student is not done taking the exam and have to leave, then they can turn in the exam to the instructor and may not come back to continue working on it.

- If a student came late to the exam, the student will not have extended time because of their late start. No examination will be passed out once the first student has completed the examination and left the class room.
- Students are responsible to come to exams with all necessary materials for examination.
- Testing materials remain the property of the instructor.
- Your cell phone must be turned off (vibrate is not OK) before the exam begins. If your cell phone is visible or you are caught looking at your cell phone at any time during a test, it will be assumed that you are cheating. Your test will be taken away and you will get a zero.
- All bags, bulky jackets and papers must be placed either under the chair or in the front of the room before you begin the exam. Take out extra pens, tissues, and anything else you might need before beginning your exam. You will not be allowed to access your bag during the test.
- You must have your own calculator. The instructor reserves the right to clear the memory from your calculator.
- The instructor also reserves the right to assign you a seat or move your seat in the middle of an exam.
- **Cheating:** Obtaining information inappropriately when taking a test, or presenting false information to the instructor regarding grades, tests, written assignments, or absences, is grounds for dismissal from the course with an “F” and referral to the Dean. At minimum, cheating on a test automatically results in a zero for that test.

Americans with Disabilities Act

The University of North Texas does not discriminate on the basis of an individual's disability and complies with Section 504 of the Rehabilitation Act and the Americans with Disabilities Act as Amended in its admissions, accessibility, treatment and employment of individuals in its programs and activities.

The university provides academic adjustments and auxiliary aids to individuals with disabilities, as defined under the law, who are otherwise qualified to meet the institution's academic and employment requirements. For information, call the Office of Disability Accommodation at 940-565-4323, TDD access: 940-565-2958 or 940-369-8652; the Office of Equal Opportunity at 940-565-2737; or Institutional Equity and Diversity at 940-565-2711. TDD access is available through Relay Texas: 800-735-2989 or 940-369-8652.

TENTATIVE COURSE CALENDAR:

The dates for tests are tentative and may be later than what is scheduled

Date	Section	Topics
Aug. 30 th	●●●	Syllabus and Intro to Chemistry
Sep. 1 st	1.1 – 1.6	Science & Technology: The Roots of Knowledge; Science; Scientific Research; Chemistry: a Study of Matter and its Changes; Classification of Matter
Labor Day Monday Sep. 5th All Campuses Closed		
Sep. 6 th	1.7 – 1.10	Measurements of Matter; Density; Energy: Heat & Temperature
Sep. 8 th	2.1 – 2.4	Atoms; Conservation of Mass, Definite Proportions; Atomic Theory; Mole and Molar Mass
Sep. 13 th	2.5 – 3.5	Mendeleev and the Periodic Table; Atoms and Molecules; Rutherford's Experiment; The Atomic Nucleus
Sep. 15 th	3.6 – 3.7	Electron Arrangement: Bohr and Quantum Models; Electron Configurations and the Periodic Table
Sep. 20 th	●●●	Review Before Exam 1
EXAM 1 – Thursday Sep. 22th		
Sep. 22 nd	●●●	Exam 1
Sep. 27 th	4.1 – 4.5	Stable Electron Configurations; Lewis Symbols; Formulas & Names of Ionic Compounds
Sep. 29 th	4.6 – 4.10	Covalent Bonds; Polar Covalent Bonds; Polyatomic Molecules; Poly Atomic Ions; Rules for Writing Lewis Structures

Date	Section	Topics
Oct. 4 th	4.11 – 4.12	VSEPR Theory; Polar & Non-Polar Molecules
Oct. 6 th	5.1	Chemical Sentences: Equations
Oct. 11 th	5.2 – 5.4	Avogadro's Number & the Mole; Mole-to-Mass & Mass-to-Mole Conversions
Oct. 13 th	5.5	Solutions
Oct. 18 th	6.1 – 6.4	Solids, Liquids, & Gases; Ionic & Molecular Substances; Forces Between Molecules; Forces in Solutions
Oct. 20 th	6.5 – 6.7	Gases: The Kinetic Molecular Theory; Simple Gas Laws; Ideal Gas Law
Oct. 25 th	●●●	Review Before Exam 2
EXAM 2 – Thursday Oct. 27th		
Oct. 27 th	●●●	EXAM 2
Nov. 1 st	7.1 – 7.5	Acid, Bases, & Salts; Acidic & Basic Anhydrides, Strong & Weak Acids & Bases, Neutralization
Nov. 3 rd	7.6 – 7.8	The pH Scale, Buffers & Conjugate Acid-Base Pairs, Acids & Bases in Industry & Daily Life
Nov. 8 th	8.1 – 8.2	Oxidation & Reduction: Four Views; Oxidizing & Reducing Agents

Date	Section	Topics
Nov. 10 th	8.3 – 8.7	Electrochemistry: Cells & Batteries; Corrosion & Explosion, Oxygen; Common Reducing Agents, Oxidation, Reduction, & Living Things
Nov. 15 th	9.1 – 9.8	Aliphatic Hydrocarbons; Aromatic Compounds; Halogenated Hydrocarbons; Functional Groups: Alcohols, Phenols, Ethers, Aldehydes, Ketones, Carboxylic Acids, Esters, Amines & Amides
Nov. 17 th	●●●	Review Before Exam 3
EXAM 3 – Tuesday Nov. 22nd		
Nov. 22 nd	●●●	EXAM 3
Thanksgiving Holiday Nov. 24th – Nov. 27th All Campuses Closed		
Nov. 29 th	11.1 – 11.2	Natural Radioactivity; Nuclear Equations
Dec. 1 st	11.3 – 11.6	Half-Life & Radioisotopic Dating; Artificial Transmutation; Uses of Radioisotopes; Penetrating Power of Radiation
Dec. 6 th	11.7 – 11.9	Energy from the Nucleus; Nuclear Bombs; Uses & Consequences of Nuclear Energy
Dec. 8 th	●●●	Review for Final Exam
Comprehensive Final Exam Tuesday, Dec 13th		