

CHE 128 Introductory Chemistry

Section D — TR 10:00 – 11:20 AM — Riverside Center 107

Instructor: Dr. Matthew Wilson

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Office Hours: Dr. Wilson will be available 1:00 – 2:30 PM Monday through Thursday, and at other times by appointment.

Course Description: This course deals with the fundamental principles of chemical science and basic calculations in science. Topics include scientific measurement, states of matter, solution chemistry, acid-base theory, chemical equilibrium, and oxidation-reduction reactions.

Learning Objectives:

- Understand the principles of measurement and dimensional analysis.
- Learn the language of chemistry and chemical naming conventions.
- Learn characteristics of different types of chemical reactions and the relationship between chemical species in a reaction.
- Understand the relationships between the physical properties of a gas and the model for an ideal gas.
- Apply the concepts of energy and heat.

Required Materials: *Chemistry: A Molecular Approach*, N. J. Tro, 4th ed. and a non-programmable scientific calculator (a phone or other electronic device may *not* be substituted for a calculator).

Attendance: Attendance is not mandatory, but necessary. Supplemental materials may be distributed in class, and topics may not always be covered in the text.

Communication: Class announcements, lecture notes, course documents, and grades will be posted on Blackboard (<http://ut.blackboard.com>). Students are responsible for monitoring their UT email account and the course Blackboard site.

Homework: The MasteringChemistry online homework system (<http://www.masteringchemistry.com>) will be used in conjunction with this course. No credit will be given for late submissions. The maximum number of course points that can be earned from homework is 120 points.

Exams: Each exam will be worth 120 course points. A missed exam will count as a zero, unless excused by your instructor. A decision to excuse an absence from an exam will only be considered if supported by written documentation. An excused in-class exam will be replaced by the average of the student's other three in-class exam grades; no make-up exams will be given. Any requests regarding the regrading of an exam must be made within one week of receiving the graded exam; your instructor reserves the right to regrade the entire exam.

Grades: A total of 600 points are possible in the course. Letter grades will be assigned as follows:

A	720 – 648 points	100.0 – 90.0%
AB	647 – 612 points	89.9 – 85.0%
B	611 – 576 points	84.9 – 80.0%
BC	575 – 540 points	79.9 – 75.0%
C	539 – 504 points	74.9 – 70.0%
D	503 – 432 points	69.9 – 60.0%
F	431 – 0 points	59.9 – 0.0%

Additional Resources: The Academic Center for Excellence (ACE, <http://www.ut.edu/ace/>) in the Academic Success Center offers tutoring in several subjects, including chemistry. This is available at no charge above your tuition.

Schedule: The following is a tentative schedule of chapter sections to be covered and exam dates:

August 29	Units of Measurement (Section 1.6, Appendix I.A)
August 31	Certainty in Measurements (Section 1.7)
September 5	Dimensional Analysis (Section 1.8)
September 7	Matter (Sections 1.1, 1.3-4)
September 12	Atoms (Sections 2.3-6)
September 14	The Periodic Table (Sections 2.7-8)
September 19	Review
September 21	Exam 1
September 26	Compounds (Sections 3.2-4)
September 28	Ionic Compounds (Section 3.5)
October 3	Molecular Compounds (Sections 3.6)
October 5	The Mole (Sections 2.9, 3.8)
October 10	Composition of Compounds (Sections 3.9-10)
October 12	Review
October 17	Exam 2
October 19	Chemical Equations (Section 3.11)
October 24	Stoichiometry (Sections 4.2-3)
October 26	Solutions (Sections 4.4-5)
October 31	Precipitation Reactions (Sections 4.6)
November 2	Acid–Base Reactions (Section 4.7-8)
November 7	Oxidation–Reduction Reactions (Section 4.9)
November 9	Review
November 14	Exam 3
November 16	Simple Gas Laws (Sections 5.2-3, Appendix I.D)
November 21	The Ideal Gas Law (Sections 5.4-5)
November 23	<i>No Class</i>
November 28	Gas Mixtures (Sections 5.6-7)
November 30	Energy (Sections 1.5, 6.2-4)
December 5	Review
December 7	Exam 4
December 12	Final Exam (11:00 AM – 1:00 PM)

Disclosures: The University of Tampa syllabus disclosures may be found on this course's Blackboard site.

Syllabus Modifications: The professor reserves the right to make changes to this syllabus as necessary.