

CHEM 104: MAJORS CHEMISTRY II
FUNDAMENTAL PRINCIPLES OF CHEMISTRY
SPRING 2014
MWF 10:20 - 11:10 a.m. ✧ 2121 Chemistry

INSTRUCTOR: Prof. Donald Darensbourg 406 Chemistry Bldg. 845-5417 or 5-2983
Email: djdarens@chem.tamu.edu
DJD Research website: <http://www.chem.tamu.edu/rgroup/djd/>
Office hours: Monday & Wednesday after class; or by appointment

TEACHING ASSISTANT: Rachel Chupik
Email: rachel.chupik@chem.tamu.edu
Office: 416 Chemistry Bldg. 845-4837
Office Hours: F 3:00 PM – 5:00 PM or by appointment

WEBPAGE: <http://www.chem.tamu.edu/rgroup/djd/chem104>

TEXT: “**Chemical Principles: The Quest for Insight**,” 6th Edition, Peter Atkins and Loretta Jones; W.H. Freeman and Company, New York (2010).
“**Student Study Guide and Solutions Manual for Chemical Principles: The Quest for Insight**,” 6th Edition, John Krenos, Joseph Potenza, et al.; W.H. Freeman and Company, New York (2010).

GRADING:	Hour Exams (3 at 100 pts each)	300
	Short Quizzes and homework assignments	100
	Final Exam	200
	Total:	600

EXAM SCHEDULE: **Hour Exams:** February 10, March 7, April 7
Final Exam: Tuesday, May 6, 8:00 – 10:00 AM

COURSE DESCRIPTION: Fundamentals of chemistry, particularly introductions to thermodynamics, equilibria, electrochemistry, and various applications. Special topics may be offered as time allows. Quizzes may be unannounced at various class periods. Homework will be assigned throughout the semester. This course will prepare students for further study of chemistry, and for technical and life sciences.

PREREQUISITES: For entering students with satisfactory scores on math and chemistry placement exams; Chemistry 103.

CELL PHONES, TABLETS AND OTHER ELECTRONIC DEVICES: Use of cell phones and other electronic devices in class is strictly limited to course-related activities (e.g., taking notes). Students violating this policy will be required to leave immediately. If you have an emergency, please be courteous and step outside, so as not to disrupt the class.

ADA POLICY: The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Department of Student Life, Services for Students with Disabilities, in Room 126 of the Koldus Building or call 845-1637.

AGGIE HONOR CODE

“An Aggie does not lie, cheat, or steal or tolerate those who do.”

Upon accepting admission to Texas A&M University, a student immediately assumes a commitment to uphold the Honor Code, to accept responsibility for learning, and to follow the philosophy and rules of the Honor System. Students will be required to state their commitment on examinations, research papers, and other academic work. Ignorance of the rules does not exclude any member of the TAMU community from the requirements or the processes of the Honor System.

For additional information please visit: www.tamu.edu/aggiehonor/

READING ASSIGNMENTS AND LECTURE SCHEDULE:

<u>Week</u>	<u>Chapter</u>	<u>Topic</u>
January 13 – January 17	15	Chemical Kinetics
January 20 – January 24	15	Chemical Kinetics
January 27 – January 31	8	Thermodynamics First Law
February 3 – February 7	9	Second and Third laws Entropy/Gibbs Free Energy
February 10		EXAM I
February 12 – February 14	10-11	Chemical Equilibria/Phase Transitions
February 17 – February 21	12	Acids and Bases
February 24 – February 28	13	Titration, Buffers
March 3 – March 5	13	Titration, Buffers
March 7		EXAM II
March 10 – March 14		SPRING BREAK
March 17 – March 21		Solubility Products
March 24 – March 28	14	Electrochemistry
March 31 – April 4	18	Electrochemistry/Nuclear Chemistry
April 7		EXAM III
April 9 – April 11	19	Organic Chemistry
April 14 – April 18	20	Organic Chemistry/Polymers
April 21 – April 25		Polymers
April 28		Last Class Day – Review
Final Exam: Tuesday, May 6th, 2014		
8:00 – 10:00 AM		