

CHEMISTRY 320

PHYSICAL CHEMISTRY I

Fall 2009
9:00 am - 10:30 am, MW
CNSB 211

INSTRUCTOR INFORMATION

Instructor:	Dr. Gary L. Findley
Office:	CNSB 202
Office Hours:	11:00 am - 1:00 pm M-F
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COURSE

Content: Fundamental interpretations of the physical principles of chemistry.

Goals/

Objectives: CHEM 320 presents chemical principles from a fundamental physical point of view. Topics covered include: properties of gases, thermodynamics (heat, work, internal energy, enthalpy and entropy), chemical thermodynamics (Gibbs free energy and chemical potentials), physical transformations (including phase transitions), solutions, electrochemistry, and chemical kinetics. The emphasis throughout is on equilibrium phenomena. (This is the first semester of a two-semester course. A grade of "C" or better in CHEM 320 is a prerequisite for CHEM 322.)

REQUIREMENTS

Prerequisites: "C" or better in CHEM 108; PHYS 208; MATH 132.

Text: *Physical Chemistry*, P. Atkins and J. de Paula, 8th ed. (W. H. Freeman, New York, 2006).

Material

Covered: Chapters 1 - 7, 21 - 24.

Attendance: It is your responsibility to attend class and to be punctual. Unexcused absences and/or habitual tardiness will result in a grade penalty, in accordance with the ULM Code of Student Conduct. Do *not* enter the classroom if the lecture is in progress.

EVALUATION

Exams: There will be a mid-term examination and a final examination. The final examination will be cumulative.

Homework: There will be ten homework assignments, each worth 10 pts. Late homework will not be accepted. *You may not consult homework solutions or exam solutions made available during previous years, or published compendia of worked problems.*

Grading:

homework	100	269 - 300 pts	A
mid-term exam	100	239 - 268 pts	B
final exam	<u>100</u>	209 - 238 pts	C
COURSE TOTAL	300 pts	179 - 208 pts	D
		< 179 pts	F

Mid-term grades will be given on Arrow. (Note that mid-term grades do not necessarily reflect final grades.)

Drop Date: The final date to drop a course is November 2.