

College of Arts and Sciences, Lock Haven University

Chemistry 320 – Physical Chemistry I

Fall 2011

Dr. Brent D. May	M,W,F	9:05-9:55	301 Ulmer
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Office Hours: 10:10-11:00 M,W,R,F; 1:25-2:15 M; and by appointment.

Textbook (required): *Physical Chemistry*, 9th ed., P.W. Atkins and J. dePaula, (2010), W. H. Freeman & Co.

The Lock Haven University Chemistry 320, Physical Chemistry I website may be found at:
<http://www.lhup.edu/bmay/classes/chem320>

This website is the place to check for course updates, calendar updates, copies of class notes, and any changes to the overall plan for the course. Check it out on a regular basis.

Course Outline:

Chapter 1: The properties of gases
 Chapter 20: Molecules in motion (sections 1 - 4 only) (exercises 21.1-21.20)
 Chapter 2: The first law
 Chapter 3: The second law
 Chapter 4: Physical transformations of pure substances
 Chapter 5: Simple mixtures
 Chapter 6: Chemical Equilibrium
 Chapter 21: The rates of chemical reactions
 Chapter 22: Reaction Dynamics

Course Grading:

Your grade in the course will be determined by your class participation, your performance on the quizzes, exams, and the final examination (10:00 – 11:50, Friday, Dec 16, 2011.). Because of the difficulty involved in scheduling makeup quizzes, at the end of the semester your lowest quiz score will be dropped. If you miss a quiz, that zero will count as your lowest score. Each of the course evaluation items will receive the following weight in the calculation of your overall grade:

		A	89 – 100	(89, 90 A-)	
Quizzes and Assignments	15 %	B	77 – 88	(77 – 78 B-)	87 – 88 B+)
Exams	45 %	C	65 – 76	(65 – 66 C-)	75 – 76 C+)
Final(comprehensive)	15 %	D	53 – 64		(63 –64 D+)
Laboratory	25 %	E	52 – 0		

Much of the class time throughout the semester will be spent working through examples, derivations and solving problems from the end of the chapters. You will be at a significant disadvantage if you have not made some attempt to look over and solve these problems before the class period. You will be made aware of the readings for each period during the prior class meeting.

Assignments:

Throughout the semester, you will be assigned various problems from each chapter. You will be responsible for solving and explaining your method of solution to your instructor. When graded, the following scale will be used to assess your progress and understanding of the material:

10	correct and complete solution and explanation
9	correct solution and explanation (small errors like significant figures, etc...)
...	
5	major errors in concept, theory and/or mathematics
0	no attempt to solve problem.

Your daily class attendance and participation will be included in your grade as a regularly scheduled assignment and you will receive points accordingly.

Laboratory:

The laboratory portion of CHEM 320 constitutes 25% of your overall course grade. You will receive a detailed laboratory information sheet that details the experiments, laboratory procedures, and grading at the first laboratory meeting. You must successfully complete all of the prescribed laboratory work in order to receive an overall passing grade in the course, no matter how high your grade in the lecture portion of the course.

Attendance and Academic Integrity:

It is expected that you will maintain faithful class attendance. If a situation arises that necessitates your absence, please notify me **BEFORE** the class period that will be missed. Without **prior** notification of an absence, you will not be allowed to make up any in class work or assignments. Because of the nature of the in class work, absence from class will adversely affect your course performance. **Attendance in the weekly laboratory session is MANDATORY.** Failure to complete and hand in all required laboratory work will result in failure in the course, no matter how high your lecture exam and quiz grades.

The LHU academic honesty policy is described in the *Lock Haven University of Pennsylvania Student Handbook 2011-2012*, pages 44-47. This section of the *Student Handbook* clearly explains the policy and sanctions resulting from its violation. All work performed throughout this course is expected to be that of the student whose name appears on the material. If you have any questions regarding academic honesty, you should consult the *Student Handbook* or feel free to discuss the matter with Dr. May.