Course Syllabus: CHEM 328 Section 500: Physical Chemistry II  

Fall 2008

Meeting Location and Time: Room CHEM 2122 at 11:30 a.m. - 12:20 p.m. MWF.

Instructor: Professor Danny L. Yeager

Professor Yeager’s Office Location: 254B Chemistry

How to Contact Professor Yeager: 845-3436 (office phone)  
yeager@mail.chem.tamu.edu (e-mail)

- Phone calls to Professor Yeager should be made, in general, during his office hours.
- Please do not phone Prof. Yeager or knock on his office door at any time before class daily.
- Note that, in general, phone calls will not be returned, i.e., you are responsible for contacting Prof. Yeager. In other words, if he is not in his office when you call and you need to talk to him then you should keep trying until he answers personally. Messages can be left on his answering machine; however, do not leave a message on his answering machine asking him to call you back.
- E-mail is a great way to contact Professor Yeager about questions on the material and on other matters related to the course.

Prof. Yeager’s Office Hours: 2:00 p.m. - 3:00 p.m. T, 12:30 a.m. - 1 p.m. W, and 11:00 a.m. - 12: p.m. R.  
These may be subject to change at Prof. Yeager’s discretion. In general (but not always), he will also be available also for a few minutes after class in the classroom. Professor Yeager’s office hours will be in 254C, the conference room outside his office, or in his office. If he is not present in 254C, then please knock on his office door to let him know you are waiting. Note that ALL questions concerning grades and scores on individual tests will occur in private in Professor Yeager’s office.

If you want to see Prof. Yeager you should do so during office hours. Appointments are not necessary to see him during office hours. If you wish to see him at times other then his office hours you will need to make an appointment; however, you are strongly encouraged -- and will be asked -- to see him during office hours instead if you at all can. Short questions that are not particularly complicated or that do not require lengthy explanation can also be submitted at any time to Prof. Yeager via e-mail. They will be answered in a timely fashion -- hopefully within 24 hours. Remember, however, that spam filters may accidentally place your email or mine to you in trash. If you don’t get a response from him within a few days, please let him know.

Course Grader: The course grader is Kousik Samanta. He will look at the homework, keep course records, help proctor exams, grade some questions on the exams based on an answer key Professor Yeager prepares for him. He will not have office hours this semester.

Prerequisites: CHEM 327 and the prerequisites for that course.

Text: Physical Chemistry by Robert Silbey, Robert Alberty, and Moungi Bawendi, John Wiley, 4th ed. It is important that you have access to this book since readings and homework will be assigned from it. You may also want to purchase the Student’s Solutions Manual. This textbook should be viewed as a supplement to the lectures.

Material Covered: This course will cover the major topics from the material in Chapters 1-7 (Thermodynamics), Chapters 17-20 (Kinetic Theory of Gases and Chemical Kinetics), and Chapter 16 (Statistical Thermodynamics).

Class Attendance: Although roll will not usually be taken, you are expected to attend all of the classes. According the Texas A&M University Student Rules: "The university views class attendance as an individual student responsibility. Students are expected to attend classes and to complete all assignments.” Note that I will sometimes lecture on material that is not directly covered in the text and that I do not give out copies of
my lecture notes. Hence, it is wise and beneficial to attend all course lectures. If you miss a class you should get a copy of the notes from another student.

Exams: There will be three midterms and no final. The first midterm will be worth 20% of the grade; the second will be worth 30% of the grade; and the third will be worth 40% of the grade. Exam 1 will be on Friday, October 3; exam 2 will be on Monday, November 10, and the third will be on Monday, December 1. Each midterm exam will tend to emphasize the material that has been covered since the previous exam; however, questions will also be asked over all material that had been covered to date in CHEM 328. A “practice” exam will be given out to the class prior to each of the first two mid-terms but not the third. The third midterm will be more comprehensive concerning CHEM 328 material than the previous two exams. All exams will be closed book with no notes or other extraneous material allowed (except possibly for calculators). The exams, in general, will have some short answer and “fill-in-the-blank” questions as well as problems.

Prof. Yeager will announce at least two days ahead of an exam date if calculators will be allowed for that exam. If calculators are allowed for an exam, the only calculators that will be acceptable will be inexpensive calculators with very limited memory and math functions, e.g., the kind that are typically allowed in First-Year Chemistry. We may check them at the door to see that the calculators are not complex and that all memories are cleared. If there is a question in our minds about this then you will not be allowed to use your calculator for the exam. If you are unsure whether or not your calculator will qualify --- see me.

Only “approximate” estimated letter grades will be given for each midterm based on numerical scores. The final grades for each student for the course are determined from the percentage scores with the weightings above and not from these estimated grades on each midterm.

Finally, if you miss an exam --- you must have a legitimate, university approved excuse and you must also contact Prof. Yeager as soon as possible (but no later than two working days after the absence) letting him know.

Class and Exam Attendance: The following is from the Texas A&M Student Rules on class and exam attendance (http://student-rules.tamu.edu/rule7.htm):

7.1 The student is responsible for providing satisfactory evidence to the instructor to substantiate the reason for absence. Among the reasons absences are considered excused by the university are the following: (2Muster)

7.1.1 Participation in an activity appearing on the university authorized activity list. (see List of Authorized and Sponsored Activities)

7.1.2 Death or major illness in a student’s immediate family. Immediate family may include: mother, father, sister, brother, grandparents, spouse, child, spouse’s child, spouse’s parents, spouse’s grandparents, stepmother, step-father, step-sister, step-brother, step-grandparents, grandchild, step-grandchild, legal guardian, and others as deemed appropriate by faculty member or student's academic dean.

7.1.3 Illness of a dependent family member.

7.1.4 Participation in legal proceedings or administrative procedures that require a student's presence.

7.1.5 Religious holy day. (See Appendix IV.)

7.1.6 Injury or Illness that is too severe or contagious for the student to attend class.

7.1.6.1 Injury or Illness of three or more days. For injury or illness that requires a student to be absent from classes for three or more business days (to include classes on Saturday), the student should obtain a medical confirmation note from his or her medical provider. The Student Health Center or an off-campus medical professional can provide a medical confirmation note only if medical professionals are involved in the medical care of the student. The medical confirmation note must contain the date and time of the illness and medical professional’s confirmation of needed absence.

7.1.6.2 Injury or Illness less than three days. Faculty members may require confirmation of student injury or illness that is serious enough for a student to be absent from class for a period less than three business days (to include classes on Saturday). At the discretion of the faculty member and/or academic department standard, as outlined in the course syllabus, illness confirmation may be obtained by one or both of the following methods:
a. Texas A&M University Explanatory Statement for Absence from Class form available at http://attendance.tamu.edu

b. Confirmation of visit to a health care professional affirming date and time of visit.

7.1.6.3 An absence for a non acute medical service does not constitute an excused absence.

7.1.7 Required participation in military duties.

7.1.8 Mandatory admission interviews for professional or graduate school which cannot be rescheduled.

7.2 The associate dean for undergraduate programs, or the dean’s designee, of the student’s college may provide a letter for the student to take to the instructor stating that the dean has verified the student’s absence as excused.

7.3 Students may be excused from attending class on the day of a graded activity or when attendance contributes to a student's grade, for the reasons stated in Section 7.1, or other reason deemed appropriate by the student's instructor. To be excused the student must notify his or her instructor in writing (acknowledged e-mail message is acceptable) prior to the date of absence if such notification is feasible. In cases where advance notification is not feasible (e.g. accident, or emergency) the student must provide notification by the end of the second working day after the absence. This notification should include an explanation of why notice could not be sent prior to the class.

If needed, the student must provide additional documentation substantiating the reason for the absence, that is satisfactory to the instructor, within one week of the last date of the absence.

If the absence is excused, the instructor must either provide the student an opportunity to make up any quiz, exam or other graded activities or provide a satisfactory alternative to be completed within 30 calendar days from the last day of the absence.

7.4 The instructor is under no obligation to provide an opportunity for the student to make up work missed because of an unexcused absence.

7.5 See Part III, Grievance Procedures: 45. Unexcused Absences, for information on appealing an instructor’s decision.

7.6 If the student is absent for excused reasons for an unreasonable amount of time during the semester, the academic dean of the student’s college may consider giving the student a grade of W during the semester enrolled or a NG (no grade) following posting of final grades.

7.7 Whenever a student is absent for unknown reasons for an extended period of time, the instructor should initiate a check on the welfare of the student by reporting through the head of the student’s major department to the dean of the student’s college.

Be sure to note that for missed exams: “7.1.6.2 Injury or illness less than three days” -- I will always require b. confirmation of visit to a health care professional affirming date and time of visit (NO EXCEPTIONS); as well as “7.1.6.3 An absence for a non acute medical service does not constitute an excused absence”, 7.3 and 7.4.

Homework: Homework will count as 10% of the grade. Homework problems will be assigned on a weekly basis and must be turned in as “complete”, i.e. no turning in an incomplete assignment on time with the remainder a few days late. It MUST be stapled together. If it is not -- it will NOT be accepted. Typically, homework will be due on Fridays or Mondays. It must be turned in by placing it on the table in front of room 2121 before the start of lecture or in the “In” box in the bookcase outside Prof. Yeager’s office. For the former for full credit it must be turned in before the start of class on the due date to be considered as “on time”. For the latter, homework must be placed in the “In” box no later than five minutes before the start of class for full credit. Start of class is defined as when Prof. Yeager begins lecturing. Hence, it’s pointless to rush up to the front of class to turn in homework if Prof. Yeager has started lecturing (and please don’t do that -- it’s disruptive). Each problem will be “graded” with a check/no check and will count as 1 (or more) homework points. Note that a check means only you have made a reasonable attempt to work out the problem and does not necessarily mean that you have done it correctly. 20% per day will be deducted for late homework -- starting after the due homework is collected at the beginning of class. 11:30 a.m. is considered as the beginning of the next day. Some of these problems have a “tendency” to appear on the exams -- so it’s wise to know how...
to do them correctly. If you don't understand how to work a problem then you should see/contact Dr. Yeager for help during his office hours.

**Copies of Syllabus, Problem Assignments, and Other Handouts:** The syllabus, problem assignments, and occasionally a few other things will be given out during class. Prof. Yeager will place a few extra copies of handouts in the bookcase outside his office. Note that once all copies are gone there will be no others available (so don’t ask either Prof. Yeager for additional ones). That is, you are responsible for obtaining and keeping track of your copy of the syllabus, homework assignments etc. If you lose your copy (or never obtained one by missing class) then check for extras in the bookcase outside Prof. Yeager’s office. If none are there then your only recourse is to get a copy of the material from other students or from the web.

**Web site:** www.chem.tamu.edu/rgroup/yeager (click on "Teaching" on the left hand side). The syllabus, problem assignments, and other course information will be available there. You should check it often for new material.

**Grades:** I expect that the average grade for this class will be B-/C+. However, if all of you do well then the grades will be higher. Likewise, if the class members don’t do so well then.....

**Important Final Notes on Grades:** For privacy reasons, your final grades will not be posted outside Prof. Yeager's door and they will not be sent to you via email. The third midterm will not be returned to you; however, after it's graded you can stop by Prof. Yeager's office to examine your final and/or discuss your grade.

The third midterm will not be returned if you would like to examine it and discuss your grade for the course, you must do so before 1 February 2009.

Also note that the course grade cut lines are firm and will not be changed under any circumstances.

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The handouts used in this course are copyrighted. By "handouts," I mean all material generated for this class, which include but are not limited to syllabi, quizzes, exams, lab problems, in-class materials, review sheets, and additional problem sets. Because these materials are copyrighted, you do not have the right to copy the handouts, unless I expressly grant permission.

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Americans with Disabilities Act (ADA) Policy Statement): The Americans with Disabilities Act (ADA) is a federal antidiscrimination 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 Cain Hall, Rm. B118, or call 845-1637.

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