CHEMISTRY 464
CHEMICAL KINETICS AND DYNAMICS
Fall 2009

CLASS MEETING TIME/LOCATION:  MWF, 11:15 AM – 12:05 PM, 351 Willard

INSTRUCTOR:  Prof. Sharon Hammes-Schiffer
401A Chemistry Building; 865-6442
shs@chem.psu.edu

You can contact Professor Hammes-Schiffer about the course using e-mail or by making an appointment.

OFFICE HOURS:  Held in room 401A Chemistry Building by appointment.

PREREQUISITES:
Prerequisites for this course include CHEM 450 or CH E 220 and CHEM 452, as well as a working knowledge of calculus. If you have any questions about your preparation for this course, you should talk to the instructor.

COURSE MANAGEMENT SYSTEM:  http://cms.psu.edu/

TEXTBOOK (REQUIRED):
Paul L. Houston, Chemical Kinetics and Reaction Dynamics (Dover Publications, 2006).
This course will cover Chapters 1-3, 5.1-5.3, 61.-6.4, 8.1-8.3 of this book, as well as extra material on molecular dynamics simulations.

FORMAT:
The course will be conducted in a combined lecture/recitation format. Problem solving and other assignments will be performed in small groups in class on most Fridays. In addition, homework problems from the book will be assigned on a weekly basis but will not be collected or graded. Success on the midterm exams will rely on the ability to solve problems directly related to the homework problems.

FINAL PROJECT:
Instead of a final exam, a final project including both a written and an oral component will be required. The written component will be a 5-page paper, and the oral component will be a 25-minute seminar to the class. Each student will choose a recent paper from the literature that is related to kinetics and will examine the role of chemical kinetics in this research. All topics must be approved by the instructor.

GRADING:
Group assignments: 25%
Two midterm exams: 25% each
Final project: 25%
EXAM REGRADING POLICY:
All requests for regrades must be given in writing to the professor within one week from the class at which the exams were returned. You must turn in the exam with a separate page containing a written explanation. The written explanation must clearly state why you think that you should have received more points. In this case, the instructor will regrade the entire exam, and the final score may be lower than the original score. We follow this procedure because the graders may make mistakes, but these errors can be made on both sides. If you find an error in adding up the points, we will correct the score without regrading the entire exam.

All Penn State policies (http://www.psu.edu/ufs/policies/) regarding ethics and honorable behavior apply to this course.