CHEG 342 Heat and Mass Transfer
Spring 2010

CHEG 342-010 9:30-10:45  TR 104 CLB
CHEG 342-011 11:00-12:15  TR 104 CLB

INSTRUCTORS:
Anne Skaja Robinson  
Office: CLB 227  
E-mail: asr@udel.edu  
Office hours: F 11

Norman J. Wagner  
Office: CLB 237A  
E-mail: wagnernj@udel.edu  
Office hours: T 3:30 PM  
Asst. Megan Argoe (mhargoe@admin.udel.edu)

TEACHING FELLOW:
Kelly Schultz  
Office: CLB 017  
E-mail: kschultz@udel.edu  
Office hours: R 3:30 & by appointment.

TEACHING ASSISTANT:
Steve Traylor  
Office: CLB xx  
E-mail: straylor@UDel.Edu  
Office hours: M (2 hr) & R (1 hr)

CONSULTANT:
TW Fraser Russell  
Office: CLB 263  
E-mail: twfr@udel.edu  
Office hours: by appointment.

Text: (available in the bookstore)
Interactive Book Web Page: http://mht.drupal4ed.com/user
Course website: www.udel.edu/sakai

Supplementary Material:
References (On reserve in Morris 1 day loan)
Perry, Chemical Engineering Handbook, 7th ed. (NOTE: in Morris Reserve Section and available online through the AICHE).
Other Reference Material

http://www.nist.gov/

Goal

This course is designed to give students a quantitative understanding of the mechanism of mass and heat transfer in physical situations of importance to chemists and chemical engineers. This is accomplished by the analysis of experiments, mathematical modeling, and comparison of model behavior with experimental results. The verified models are used to illustrate:

- The design and operation of process equipment at the lab, pilot and commercial scale
- The analogies between heat, mass and momentum transport
- The analysis, prediction of behavior, and control of living organisms and the natural environment

Course Requirements

Problem Sets

One per week  15%

Homeworks are due at the start of class on the due date; late assignments will not be accepted. Homework assignments must be legible and written on engineering paper, or when printed by computer, on clean white paper. The lowest score on one assignment will be dropped. We encourage you to work together on the homework assignments; however, you must hand in your own work and indicate your group partners. (Refer to the student handbook regarding University policy on plagiarism.)

Website Quizes/Assignments

10%

Exams

March 12  25%
April 28  25%
Final – To be announced  25%

The percentage assigned to exams and final may be varied as much as 5%.

The following schedule is approximate only, except for the Exam dates. If we must spend more time on any topic to assure that you have learned the material, we will do so.

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1 We have observed a direct correlation between those who “hand copy” homework solutions and poor exam grades. Working in groups has many advantages, but make sure you contribute and that you can do the homework problems you hand in.