

Chemical Engineering Thermodynamics II

ChE 06315

Tuesdays and Thursdays 10:10 am – 12:05 pm, Rowan 340

INSTRUCTOR: Dr. Mariano J. Savelski, Associate Professor
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TEXT: **Chemical, Biochemical, and Engineering Thermodynamics**
S. I. Sandler, 4th Edition, Wiley, 2006.

OFFICE HOURS

Students are welcome (and encouraged) to come as needed. If I am in my office and not on the phone or with another student, I will make time for you. At minimum, we will arrange a time to meet that will accommodate both of our schedules.

RESPONSIBILITIES

To succeed in this class, you should read the relevant material before coming to class, make a reasonable effort to do the assigned homework, hand in what you accomplish, and ask questions on points that you do not understand. I will lecture on points in the book and on supplemental topics, attempt to answer all serious questions, make myself available to anyone needing extra help, administer fair but demanding exams, and grade and return assignments in a reasonable time. All exams will be graded within a week.

INSTRUCTIONAL OBJECTIVES

1. Instructional objectives for Sandler Chapter 8 (p 336 of text)
2. Instructional objectives for Sandler Chapter 9 (p 399 of text)
3. Instructional objectives for Sandler Chapter 10 (p 489-490 of text)
4. Instructional objectives for Sandler Chapter 11 (p 575 of text)
5. Instructional objectives for Sandler Chapter 12 (p 658 of text)
6. Instructional objectives for Sandler Chapter 13 (p 703 of text)
7. Instructional objectives for Sandler Chapter 15 (p 822-823 of text)
8. Instructional objectives for Sandler Chapter 14 (p 778 of text)

GRADING: 3 exams	60%
Final Exam	25%
Workshops (drop 1) and Homework	10%
Class Participation and Professional Behavior	5%

ABSOLUTE GRADING SCALE

In this course we would like to create an atmosphere of positive cooperation between students. In addition, most of the exercises in this course will require you to work in teams and you will be expected to help each other learn the material. To encourage and support cooperative learning you will be graded on an absolute grading scale as given below. The net result is that it is in your interest to help your classmates become successful engineers. You will learn through teaching others.

Letter Grade ranges	Percentages between	
A	90	100
B	80	89
C	70	79
D	60	69

POLICIES

1. Regular attendance is expected as your class participation will be evaluated and graded. You are responsible for all material whether you are in class or not. If you will be absent, you should notify the instructor via email at least 24 hrs before class.
2. Students are expected to be ready for class at the beginning of the class period.
I have a zero tolerance policy to being late to class (including examination days)
No student will be admitted late as this constitutes a disturbance to class activities. If a student insists on walking in late, this behavior will result in a *grade of zero* for the Professional Behavior portion of the final grade.
3. Late work of any kind will not be graded.
4. Each student will be assigned to a collaborative study group. If every member of that group scores above 83 on an exam, each group member will receive four bonus points on the exam.

WORKSHOPS

These are in-class problem solving sessions. The class will be randomly divided into groups of 2 or 3 students. Problems related to the past week's material will be distributed to each group. Each group will work on their problem, develop their solution, and submit the problem solution to the instructor. Groups may help each other, but each group must write up its own solution and submit it. If a student is absent on a day a workshop is given he/she will receive a zero on that workshop. There are no makeups for these workshops.

TEAM HOMEWORK

Each student will be assigned to a collaborative study group of 3-4 students.

Homework will be periodically assigned. Each team/study group should only submit one homework assignment, and all listed team members will receive the same grade. Late work of any kind will not be graded. Collaboration on homework is acceptable and encouraged, but all tests must be done independently. All students will periodically be asked to submit evaluations of how well their peers performed as team members. These

evaluations will be used at the end of the semester to adjust the final grading. Also, this periodic assessment will help identify problems in teams. The grade received on all team assignments is a “raw score”. Raw scores will be adjusted according to each individual’s contribution to the overall team effort. Each team member will be evaluated by every member of the team, including him/herself. The adjusted score (not the raw score) will be used in calculation of course grades. Thus, the student who consistently demonstrates a higher level of effort may be rewarded. Likewise, the student who does not contribute substantially to team assignments may be penalized.

Please be aware that the adjustment of grades for team assignments can substantially impact the overall course grade, either positively or negatively.

WORKSHOPS AND HOMEWORK GRADING

Solutions will be scored according to the following scale:

- 4 points – Correct solution method, equations and tables properly cited, units clearly shown throughout the entire problem, and correct numerical answer.
- 3 points – Correct solution method, equations and tables properly cited, units clearly shown throughout the entire problem, and incorrect numerical answer.
- 2 points – Partially correct solution method, equations and tables properly cited, units clearly shown throughout the entire problem.
- 1 point – Incorrect solution method OR equations and/or tables are NOT all properly cited OR units are missing in two or more instances.
- 0 points - Problem not done.

At the end of the semester homework and workshops points will be added and normalized based on the maximum attainable points.

EXAMS

Three equally weighted exams will be given. *All exams are comprehensive with an emphasis on material covered since the previous exam.* A comprehensive final exam will be given during Finals Week. All exams will be open-book and notes unless otherwise announced. Absence at examination time is excusable only in case of well-documented illness of the student or similar emergency. An unexcused absence from an exam will result in a zero grade on that exam.

If you feel that a test problem has been graded improperly (except for misadding points), you must resubmit the problem **within 72 hours** along with a **written** appeal and explanation. Upon receipt of this formal appeal, I will regrade the problem. This means that your score may go up or down.

PROFESSIONAL BEHAVIOR

All students are expected to behave professionally, unprofessional behavior includes but is NOT limited to, being late to class, walk in and out of class while in session, cell phone use/ringing in class, working on assignments foreign to the class, sleeping in class, disrupting the class, chatting in class, and horseplay.

ACADEMIC MISCONDUCT

Any student engaged in an act of academic misconduct, which includes but is NOT limited to, cheating, plagiarism, use of written or oral offensive language, tempering with other student's files, and tempering with other student's computer accounts, will receive a grade of **F** for this course. Depending on the nature of the offense, the student's case may also be forwarded to the Dean of Students for University review.

If another student is knowingly involved in the offense, he or she will receive the same penalty.

STUDENTS WITH DISABILITIES: If you have a documented disability that may have an impact on your work in this class, please contact me. Students must provide documentation of their disability to the Academic Success Center in order to receive official University services and accommodations. The Academic Success Center can be reached at 856-256-4234. The Center is located on the 3rd floor of Savitz Hall.

IMPORTANT DATES

Date	Time	Room	Event
02-10	10:10 AM	ROW 340	Exam 1
03-26	10:10 AM	ROW 340	Exam 2
04-14	10:10 AM	ROW 340	Exam 3
05-?	TBA	TBA	Final Exam

WITHDRAW SIGNATURE SCHEDULE FOR ALL COURSES

Jan 27 to Mar 9 (W) Student, Professor

Mar 10 to Apr 6 (WP/WF) Prof, Dept Chair

Apr 7 to May 9 (WP/WF) Prof, Dept Chair, Dean