SYLLABUS
ENME 633: Molecular Thermodynamics
Spring 2020

Course Description:

This course focuses on physical and mathematical insight into the properties of matter and the intermolecular forces, which govern meso- and macro-scale thermodynamics relevant to engineering applications. This course is designed to build students' knowledge for and confidence in applying statistical thermodynamics to solve engineering problems for a range of materials and processes.

Class Times and Locations:
Lectures: Tu, Th 2:00pm - 3:15pm (CHE 2145)

Instructor:
Dr. Bao Yang
Phone: 301-405-6007, Email: baoyang@umd.edu
Office hours: Location: 4164D Glenn L. Martin Hall
Hours: 3:30pm-5:30pm, Thursday, or by advanced appointment

Textbook:
An Introduction to Applied Statistical Thermodynamics, by Sandler.
Publisher: Wiley, ISBN: 9780470913475
This book will be reserved in STEM library.

Evaluation / Grading Criteria:
The course grade will be calculated as follows:

Class Participation (attendance and proper interaction)	8%
Homework	10%
Term Paper	15%
Midterm Exam	27%
Final Exam	40%
TOTAL	100%

Requirements and Considerations:

1. Attendance and active participation are required. Please refer to the Attendance and Assessment Policy given in the Schedule of Classes, http://www.testudo.umd.edu/ScheduleOfClasses.html and http://www.testudo.umd.edu/soc/atedasse.html

   In exceptional circumstances (illness, university business, religious observances) extensions may be granted for assignments. However, all extensions must be approved by the instructor BEFORE the due date.

   Please refer to the Course Related Policies given on the web http://www.ugst.umd.edu/courserelatedpolicies.html

2. **Lectures** will normally be given by the Instructors. Occasionally, there will be a substitute. Lectures will deal with the general subject matter of the textbook but will also include material not in the text.

3. **Homework** will be assigned for each chapter. Homework problem solutions will be posted online. Students should view homework assignments as learning experiences. *You may consult with your classmates, but you must work on your homework individually. This is the only way you can assure yourself that you are ready for exams.*
   As a courtesy to the professor, solutions should be written neatly

4. The **Term Paper topic** will be posted on the course website right after the Midterm Exam. The project is due on University-assigned final exam date. The students need to send their project report to the professor via email.

5. The Class Web site is at **WWW.ELMS.UMD.EDU/**. Communication between instructors and students outside the classroom will take place primarily through the class website. Announcements, homework, lecture slides, grades and other course related materials will be posted there.

6. **Midterm Exam and Final Exam** are currently scheduled for March 26 and May 12, respectively. These dates will be confirmed at least one week in advance. It is open book exam. It is important that you show all your work in order to receive full credit. No points will be given for an answer that doesn't include the procedure used to obtain it.

   Makeup exams will be given only when a student can present evidence that an absence was caused by serious illness, a death in the immediate family, religious observance, or participation in University activities at the request of University authorities. Please contact the instructor before an anticipated exam absence, if at all possible.

   The following university rules govern all in-class examinations. A breach of any of the rules constitutes a "disruption of class," a disciplinary offense (Code of Student Conduct, section 9.m.), or may serve as the basis of an allegation of academic dishonesty:

   1) Students arriving late for an examination may not unreasonably disrupt the examination room.
   2) Students must leave all unauthorized materials with the proctor before being seated.
   3) Where seating arrangements are established by proctors, students must conform to these arrangements.
   4) Students may not return to an examination room after leaving, unless permission to do so has been granted by the proctor prior to the students' departure.
   5) Students must cease conversation prior to the passing out of examination papers and maintain silence during the entire examination period.
   6) Students must place examination papers face down on the writing desk until the examination is officially begun by the proctor.
   7) Students must keep examination papers flat on the writing desk at all times.
   8) Students at an examination must be prepared to show current University identification.

Academic Integrity

The University of Maryland, College Park has a nationally recognized code of Academic Integrity, administered by the Student Honor Council. This Code sets standards for academic integrity at Maryland for all undergraduates and graduate students. As a student you are responsible for upholding these standards for this course. It is very important for you to be

aware of the consequences of cheating, fabrication, facilitation, and plagiarism. For more information, please visit http://www.shc.umd.edu/.

Academic integrity is a foundation for learning. The University has approved a Code of Academic Integrity available on the web at http://www.testudo.umd.edu/soc/dishonesty.html. The Code prohibits students from cheating on exams, plagiarizing papers, forging signatures, etc. The Code is administered by a Student Honor Council, which strives to promote a community of trust on the College Park campus. Allegations of academic dishonesty can be reported directly to the Honor Council (314-8206) by any member of the campus community.

The University Senate requires that students sign this statement if it is included on an exam or assignment:

> *"I pledge on my honor that I have not given or received any unauthorized assistance on this examination (or assignment)."*