

CBE 310: Molecular concepts and Applications

(Physical Chemistry for Chemical Engineers)

Professor Fisk 209 Glover
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Prerequisites: CBE 210 and Math 340
Lecture: MWF 2:00 pm - 2:50 pm
Location: Wagar 231
Instructor: Nick Fisk
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Office Hours: Tentative: Monday, Tuesday 2:00-3:00 pm or by appointment

Course Text Books:

- 1) Quantum Chemistry 3rd ed. John P Lowe and Kirk Peterson
- 2) Atkins' Physical Chemistry 8th ed., Peter Atkins and Julio De Paula

Auxiliary Texts: (Handouts will come from these but you do not need to buy)

- 1) Molecular Driving Forces: Statistical Thermodynamics in Chemistry and Biology. Ken A Dill and Sarina Bromberg.
- 2) Elements of Chemical Reaction Engineering, H Scott Fogler

Course Web Site: RAM-CT Blackboard

The course website will include handouts, homework assignments, and solutions. Check the site regularly.

Right now it has

- 1) the Syllabus**
- 2) Handout from Atkins book (and a few other helpful things)**
- 3) Slides for this weeks presentations.**
- 4) The 1st Homework assignment**

Course Description: The purpose of this course is to introduce the basic principles and applications of three core areas of physiochemical engineering: quantum chemistry, statistical mechanics, and kinetics.