

## Biophysical Chemistry

**Lectures:** MWF 9:00-9:50 Phelps 3505

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**Texts:** *Physical Chemistry: Principles and Applications in Biological Sciences* by Tinoco, Sauer, Wang and Puglisi.

*Molecular Driving Forces* by Dill and Bromberg.

**Homework:** Homework assignments will be posted on the course web page every Friday and are due the following Friday at the beginning of class. Late homeworks will not be accepted. Solutions to the homework assignments will be posted on the course web page the day that they are due.

**Exams:** In class midterm on Friday February 13.  
Final on Thursday March 19 (8:00 AM-11:00 AM).

**Grading:** Course grades will be based on homework (15%), the midterm exam (35%), and the final (50%).

**Tentative outline:**

Electrochemistry and Membrane thermodynamics: (weeks 1&2)	Tinoco ch. 4&5 Dill ch. 22
Boltzmann distribution: (weeks 3&4)	Tinoco ch. 6 Dill ch. 10
Macromolecular transport and separation: (weeks 5&6)	Tinoco ch. 6 Dill ch. 18
Chemical kinetics: (weeks 7&8)	Tinoco ch. 7&8 Dill ch. 19
Introduction to Quantum Mechanics: (weeks 9&10)	Tinoco ch. 9 Dill ch. 11