

Biophysics of Macromolecules
Bi/Ch 132
T/TH 1-2:30pm - 200 Broad

Syllabus
Fall Term, 2007

Instructors:

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Course Material:

The class is designed to introduce you to biophysical methods and issues. Please consult the class web site (<http://www.its.caltech.edu/~bich132/>) for articles and further information.

Class Meetings:

The class will meet every Tuesday and Thursday in room 200 Broad at 1:00pm.

Requirements:

Groups of 3-4 students will be formed to present research papers in accordance with one of the topics discussed in the course. Each student will be responsible for presenting his or her assigned section(s) to the class. Everyone in the group is expected to participate and present a similar amount of material. *Use Powerpoint only.*

In addition to a topic presentation, each student is required to develop an original research proposal. Further details will be discussed in class.

Topics:

Single Molecule Experiments I	Mass Spectrometry of Biomolecules
Single Molecule Experiments II	Chemical Imaging
<i>In vivo</i> Sensors	Biomolecule Reaction Dynamics
Nanoparticle Probes and Sensors	Physical Methods of Neurobiology
Arrays	Dynamic Crystallography

Bi/Ch 132 Speaker Schedule:

	Tuesday	Thursday
Oct. 2, 4	Organizational Meeting	-
9, Friday 12	Barton	Barton
16, 18	Beauchamp	Beauchamp
23, 25	Beauchamp	Barton
Oct. 30, Nov. 1	Student lecture Andrea/Alon	Beauchamp #1
6, 8	Beauchamp #2	Barton #1
13, 15	Beauchamp #3	Beauchamp #4
20, 22	Barton #2	Thanksgiving
27, 29	Beauchamp #5	Barton #3
Dec. 4, 6	Barton #4	Barton #5