
Lecture #1, Tuesday, September 4 th ,	Introductory biological thermodynamics
Lecture #2, Thursday, September 6 th ,	DNA, RNA and their stabilizing interactions
Lecture #3, Tuesday, September 11 th ,	Proteins, their stability and dynamics
Lecture #4, Thursday, September 13 th ,	Thermodynamics of protein folding: a brief and practical approach (Lecture delivered by Professor Stewart Loh , SUNY Upstate Medical University)
Lecture #5, Tuesday, September 18 th ,	Transition state theory and reaction kinetics
Lecture #6, Thursday, September 20 th ,	Single-molecule biophysics. Principles and objectives
Lecture #7, Tuesday, September 25 th ,	How does an atomic force microscope work?
Lecture #8, Thursday, September 27 th ,	Mechanical stress-induced structural transitions in proteins
Lecture #9, Tuesday, October 2 nd ,	Journal Club 1: Mechanical stress in proteins
Lecture #10, Thursday, October 4 th ,	How does an optical tweezer work?
Lecture #11, Tuesday, October 9 th ,	Journal Club 2: Protein unfolding studied by tweezers
Lecture #12, Thursday, October 11 th ,	Introduction in fluorescence spectroscopy
Lecture #13, Tuesday, October 16 th ,	Fluorescence resonance energy transfer (FRET, I)
Lecture #14, Thursday, October 18 th ,	Fluorescence resonance energy transfer (FRET, II)
Lecture #15, Tuesday, October 23 rd ,	Patch-clamp techniques/technology (I)
Lecture #16, Thursday, October 25 th ,	Patch-clamp and ion channels (II)
Lecture #17, Tuesday, October 30 th ,	Where is the excitability coming from?
Lecture #18, Thursday, November 1 st ,	Nanopores and single-molecule biophysics
Lecture #19, Tuesday, November 6 th ,	Lesson about cryoelectron microscopy. Professor Stephan Wilkens (SUNY Upstate)

- Lecture #20**, Thursday, November 8th, Lesson about X-ray crystallography
Professor **Gino Cingolani** (SUNY Upstate)
- Lecture #21**, Tuesday, November 13th, Lesson about Biological NMR Spectroscopy
Professor **Phil Borer** (SU Chemistry)
- Lecture #22**, Thursday, November 15th, **First session of oral presentations (five students)**
- Lecture #23**, Tuesday, November 20th, **Second session of oral presentations (five students)**

Thanksgiving Break - No classes, November 21st - 25th

- Lecture #24**, Tuesday, November 27th, Lesson about BioNanoTechnology (I)
Professor Yan-Yeung Luk (SU Chemistry)
- Lecture #25**, Thursday, November 29th, BioNanoTechnology II
- Lecture #26**, Tuesday, December 4th, BioNanoTechnology III
- Lecture #27**, Thursday, December 6th, BioNanoTechnology IV

December 7th - Last day of classes

Final Exam: Friday, December 14th, 8:00 - 10:00 A.M.