Physics 554: Molecular Biophysics

Brief Course Summary
This course spans the area in biophysics known as "molecular biophysics". The focus is on the molecular structure and dynamics of proteins, and how the underlying molecular structure and dynamics generates the observed function. A unique feature of the course is that introductory material and experimental techniques are described in the context of specific protein systems, which are selected because they are paradigms for biophysical structure-dynamics-function correlations.

Principal Topic Areas
- Introduction to Protein Structure & Dynamics
- The Protein Folding Problem & Protein Structure Prediction
- Solar Energy Conversion in Photosynthesis (Bimolecular Reactions)
- Molecular Amplification in Visual Transduction (Biomolecular Interactions)
- Molecular Motors (Energy Transduction)

Students in the biological, chemical and physical sciences, who are interested in understanding “nature’s nanotechnology”, are encouraged to enroll in this inherently interdisciplinary course!

Please direct questions about the course, and requests for permission to enroll, to:
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Time/Place: TTh 2:30-3:45 pm/N302 Mathematics & Science Center
Syllabus: http://www.physics.emory.edu/faculty/warncke/teaching