

8.593J Biological Physics: Spring Term 2006

Course Administration

LECTURE

Tues. and Thurs. 1 - 2:30 PM, 2-105

RECITATION

Wed. 1 - 2:00 PM, 26-314

HOMEWORK

Homework assignments will be posted on the course web site on alternate Tuesdays starting Tuesday February 7. The student's solutions to the homework will be due in the Physics Drop Boxes located on the 3rd floor of Bldg 8 at the intersection of Bldg 16, on the Monday thirteen days later by 4:30 PM. The student name should be clearly written on the upper right hand corner of the homework. The correct solutions to the problems will be distributed to students at the lecture room on the Tuesday following the due date for hand in of the assignment. Graded homework will be returned to students at the Tuesday lecture one week following the hand in of the assignment. No late homework will be accepted without prior permission of the lecturer.

TEXTBOOKS AND REFERENCE BOOKS

There is no textbook available which contains the course material which will be presented during the lectures. The lectures themselves will be the primary source of content of the course. In addition to the blackboard presentations, lectures in the form of typed notes will be presented to students each week. Listed below are reference books which may prove useful in providing background material, particularly for the biological material.

Molecular Cellular Biology, J. Darnell H. Lodish, D. Baltimore. Pub. by Scientific American Books (1986).

Biochemistry, D. Voet and J. Voet. Pub. by John Wiley and Son (1990)

Binding and Linkage: Functional Chemistry of Biological Molecules, J. Wyman and S. J. Gill. Pub. by University Science Books, Mill Valley CA (1990).

Mechanisms of Cooperativity and Allosteric Regulation in Proteins, M. Perutz. Pub. by Cambridge University Press (1990).

Human Physiology: The Mechanisms of Body Function, Vander, Sherman and Luciano. Pub. by McGraw-Hill (1980).

Allosteric Enzymes, Ed and G. Herve. Pub. by CRC Press (1989).

Human Hemoglobins, H. F. Bunn, B. Forset, and H. M. Ranney. Pub. by W. B. Saunders & Co. (1977).

Proteins: Structures and Molecular Properties, T. E. Creighton. Pub. by W. H. Freeman & Co. (198

TERM PAPERS

Students will write a term paper in place of a final exam. The topic of the term paper should be a subject connected with, but an extension of, a subject presented in the course. Students should have selected the theme of the paper, with the agreement of the lecturer by April 21. The term paper must be handed in to the Physics Drop Boxes (3rd floor of bldg 8 at the corner of bldg16), by 5 pm Monday, May 15.

GRADING

The final grade will be based on the performance in homework, and the grade on the term paper. Homework will contribute 60% and examination or term paper 40% to the final grade.