

ABIO 542: Principles of Biochemistry II (3 credit hrs)

Spring 2003 (MWF 12:00 - 12:50)

Instructor: Dr. James Yates (Rm 205) (X3390)

Office hours by appointment only (Tu & Th 10:00 – 12:00 & any mutually convenient time)

Text: Biochemistry 2nd Ed. (Garrett & Grisham)

Course Goals: (1) To introduce students to basic theoretical and practical concepts of Biochemistry: including: the biochemistry of Oxygen transport, carbohydrate metabolism, oxidative phosphorylation, electron transport, and monomer metabolism. (2) Provide students with the opportunity to investigate recent discoveries in the field. (3) The concepts of Biochemistry will be integrated with basic concepts of other areas of Biology and Chemistry.

Organization of Course: The course is organized into several topics. Students are expected to use the reading list below to determine the reading assignments.

Grading Policy:

Weekly Quiz	80%
Final Quiz	5%
Report	10%
Class Participation	5%

Assessment of Students: Students will be evaluated on their performance in all of the following: weekly quizzes, a final quiz, the written report and participation in class discussions.

Student Competency: To successfully complete this course, a student must demonstrate a basic understanding of the principles and applications of the chemistry and molecular logic of living cells including: structural, functional and kinetic characteristics of cellular components.

Statement for Disabled Students: "If you have a physical, psychological or learning disability which might affect your performance in this class, please contact the Office of Disability Services, 126 B&E Building (641-3690) as soon as possible. The Disabilities Services Office will determine appropriate accommodations based on medical documentation."

COURSE OUTLINE

<u>Topic</u>	<u>Chapter</u>
Review	** (various chapters)
Oxygen transport	15 (p. 480 – 499)
Metabolism (Overview)	18.1 & 18.2
Glycolysis	19
The TCA Cycle (summary)	20.2-20.12
Electron Transport & Ox Phos	21
Carbohydrate metabolism	23
Fatty Acid metabolism	24

Final (☺)

5/5/03 @ 11:00