



**INTRODUCTORY BIOCHEMISTRY  
BCMB/BIOL 3100**

**Fall Semester 2001**

*Approximate timing of course topics*

Aug. 19 - Chap. 1, Chap. 2  
Aug. 21 - Chap. 2  
Aug. 23 - Chap. 3

Aug. 26 - Chap. 3  
Aug. 28 - Chap. 4  
Aug. 30 - Chap. 4

Sept. 2. Labor Day - *No Class*  
Sept. 4 - Chap. 5  
Sept. 6 - Chap. 5

Sept. 9 - Chap. 6  
Sept. 11 - Chap. 6  
**Sept. 13 - EXAM 1**

Sept. 16 - Chap. 7  
Sept. 18 - Chap. 7  
Sept. 20 - Chap. 8

Sept. 23 - Chap. 8  
Sept. 25 - Chap. 9  
Sept. 27 - Chap. 9

Sept. 30 - Chap. 19  
Oct. 2 - Chap. 19  
Oct. 4 - Chap. 20

Oct. 7 - Chap. 20  
Oct. 9 - Chap. 21  
**Oct. 11 - EXAM 2**

Oct. 14 - Chap. 21  
Oct. 16 - Chap. 22  
Oct. 18 - Chap. 22

Oct. 21 - Chap. 10 **DerVartanian's Class Notes**  
Oct. 23 - Chap. 10  
Oct. 25 - Chap. 11

Oct. 28 - Chap. 11  
Oct. 30 - Chap. 12  
Nov. 1 Fall Break - *No Class*

Nov. 4 - Chap. 12  
Nov. 6 - Chap. 13  
**Nov. 8 - EXAM 3**

Nov. 11 - Chap. 13  
Nov. 13 - Chap. 14  
Nov. 15 - Chap. 14

Nov. 18 - Chap. 15  
Nov. 20 - Chap. 15  
Nov. 22 - Chap. 16

Nov. 25 - Chap. 16  
Nov. 27 Thanksgiving holiday - *No Class*  
Nov. 29 Thanksgiving holiday - *No Class*

Dec. 2 - Chap. 17  
Dec. 4 - Chap. 17  
Dec. 6 - Chap. 18

Dec. 9 - Chap. 18

**Dec. 12- EXAM 4 - 8:00-11:00 AM**

## **BCMB 3100 Course syllabus**

### **Chapter Number and Title (required reading\*\*)**

- \*\*1 & 2. Introduction to biochemistry / Water
- \*\*3. Amino acids and primary structure of proteins
- \*\*4. Proteins: 3D structure and function
- \*\*5. Properties of enzymes
- \*\*6. Mechanism of enzymes
- \*\*7. Coenzymes & vitamins
- \*\*8. Carbohydrates
- \*\*9. Lipids & membranes
- \*\*19. Nucleic Acids
- \*\*20. DNA replication & repair
- \*\*21. Transcription RNA processing
- \*\*22. Protein synthesis

### **The following material is covered in DerVartanian's class note booklet**

*(Be sure to purchase Dr. DerVartanian's class note booklet from at the Biology Learning Center (Room 406, Biological Sciences prior to Oct. 21.)*

- 10. Introduction to metabolism (*supplemental reading*)
- 11. Glycolysis (*supplemental reading*)
- 12. Citric acid cycle (*supplemental reading*)
- 13. Additional Pathways in carbohydrate metabolism (*supplemental reading*)
- 14. Electron transport & oxidative phosphorylation (*supplemental reading*)
- 15. Photosynthesis (*supplemental reading*)
- 16. Lipid catabolism (*supplemental reading*)
- 17. Amino acid catabolism (*supplemental reading*)
- 18. Nitrogen cycle (*supplemental reading*)

## WELCOME To Introductory Biochemistry (BCMB3100/BIOL3100)!!

### Hints for how to succeed in BCMB 3100

(from Debra Mohnen, August 19, 2002)

BCMB3100 is a demanding, information-rich course that will serve as the foundation for your upper level biology-related courses. To succeed in Introductory Biochemistry you need to **work at the material EVERY day**. You can not cram for this course. With a measured learning pace you will enjoy the course and learn a great deal. If you procrastinate and cram you will be stressed, unhappy, and probably not perform well.

Based on previous student comments **IT IS HIGHLY RECOMMENDED THAT EVERY STUDENT GET TOGETHER WITH 4 OTHER STUDENTS IN THE COURSE TO FORM A STUDY GROUP**. The names and ID numbers of the members of each group, and the first log, will be collected in class on **FRIDAY, AUGUST 30** (see the homework sheet). **The study groups are encouraged to meet at least once a week**. *Use the study groups to your advantage!!* We learn best by repeated exposure to ideas and concepts. The best way to identify what you do, or do not, understand is to try to teach it to someone else. The study groups give you this opportunity.

### Other Hints

- ? Read all the assigned material at least three times.
  - 1<sup>st</sup>: skim-read to overview chapter organization, content and new concepts
  - 2<sup>nd</sup>: read in detail
  - 3<sup>rd</sup>: read to summarize main concepts
- ? Read the assigned chapters before lecture
- ? Bring your text to lecture to avoid excessive writing
- ? The publisher of your text has a useful website (<http://www.prenhall.com/horton>). Use the information, exercises and MediaLab at website to help you learn the material. Be sure to take the tests at the website to get an indication of whether you are effectively learning the material.
- ? Meet with your study group at least once per week
- ? If you need help, please make an appointment to see me as soon as possible
- ? Keep up!!!!
- ? Attend class!!!!!!
- ? A so-called "self-quiz" may be given in class. I will call on individuals to answer questions in class. Use the self-quiz as a tool to measure how well you are learning the material.
- ? Bring a calculator to all exams