Biological Chemistry II

Lectures: T Th 9:30 – 10:45 a.m., FW 201

Instructor: Oliver Hofstetter Office: FW 428

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Office hours: T W 10:50 – 11:50 a.m., or by appointment

Required text: Lehninger "Principles of Biochemistry;" any of the following editions may be used: 4th ed., Freeman (2004/2005); or 5th ed., Freeman (2008).

Recommended Study Guide: "The Absolute, Ultimate Guide to Lehninger Principles of Biochemistry, Study Guide and Solutions Manual."

Tentative Lecture Schedule:

| Week Beginning | <u>Chapter</u> | <u>Lecture Topic</u> |
|----------------|----------------|---|
| January 14 | 13 | Introduction, Principles of Bioenergetics |
| January 21 | 14,15 | Glycolysis and the Catabolism of Hexoses |
| January 28 | 16 | The Citric Acid Cycle |
| February 4 | 17 | Oxidation of Fatty Acids |
| February 11 | 18 | Amino Acid Oxidation and the Production of Urea |
| | EXAM 1, Febr | ruary 14, 9.30 a.m10.45 a.m. |
| February 18 | 19 | Oxidative Phosphorylation |
| February 25 | 14,15 | Carbohydrate Biosynthesis |
| March 4 | 21 | Lipid Biosynthesis |
| March 11 | Spring Break | |
| March 18 | 22 | Biosynthesis of Amino Acids, Nucleotides, and |
| | | Related Molecules |
| March 25 | 23 | Integration and Hormonal Regulation of |
| | | Mammalian Metabolism |
| | EXAM 2, Mar | rch 28, 9.30 a.m10.45 a.m. |
| April 1 | 24 | Genes and Chromosomes |
| April 8 | 25 | DNA Metabolism |
| April 15 | 26 | RNA Metabolism |
| April 22 | 27 | Protein Metabolism |
| April 29 | 28 | Regulation of Gene Expression |
| | EXAM 3, May | 9, 10.00 a.m11.50 a.m. |

Exams: Each exam will be worth 100 points. Exam 3 will occur during the final exam period. Students are encouraged to give a presentation on a selected topic. This presentation is also worth 100 points and may be used to compensate for one exam. Extra credit may be earned through extraordinary participation in class.

Make-up exams: No individual make-up exams will be offered.

Late Policy: Lecture attendance is not mandatory, but highly recommended. In order to provide an undistracted learning environment for students, latecomers will not be allowed to attend class if they are more than 5 minutes late.

Grades: Letter grades will be based on the total points obtained on three exams, or on the total points obtained on two exams and a presentation.

 $A \ge 90\%$ (300 - 270 points), B 80 - 89% (240 - 269 points), C 70 - 79% (210 - 239 points), D 60 - 69% (180 - 209 points), F < 60% (< 180 points). This scale will not be raised, but it may be lowered.

If you have a disability and may require some type of instructional and/or examination accommodation, please contact me early in the semester so that I can provide or facilitate in providing accommodations you may need. If you have not already done so, you will need to register with the Disability Resource Center (DRC; formerly Center for Access-Ability Resources), the designated office on campus to provide services and administer exams with accommodations for students with disabilities. The DRC office is located on the 4th floor of the University Health Services building (815-753-1303).