

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

Instructor: Oliver Hofstetter

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

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

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

**Tentative Lecture Schedule:**

<u>Week Beginning</u>	<u>Chapter</u>	<u>Lecture Topic</u>
January 17	13	Introduction, Principles of Bioenergetics
January 24	14,15	Glycolysis and the Catabolism of Hexoses
January 31	16	The Citric Acid Cycle
February 7	17	Oxidation of Fatty Acids
February 14	18	Amino Acid Oxidation and the Production of Urea
		EXAM 1, February 17, 9.30 a.m.-10.45 a.m.
February 21	19	Oxidative Phosphorylation
February 28	14,15	Carbohydrate Biosynthesis
March 7	21	Lipid Biosynthesis
March 14	Spring Break	
March 21	22	Biosynthesis of Amino Acids, Nucleotides, and Related Molecules
March 28	23	Integration and Hormonal Regulation of Mammalian Metabolism
		EXAM 2, March 31, 9.30 a.m.-10.45 a.m.
April 4	24	Genes and Chromosomes
April 11	25	DNA Metabolism
April 18	26	RNA Metabolism
April 25	27	Protein Metabolism
May 2	28	Regulation of Gene Expression
		EXAM 3, May 12, 10.00 a.m.-11.50 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. Students may earn extra credit through extraordinary participation in class.

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

**Grades:** Note that graduate students are required to demonstrate advanced knowledge, skills, and abilities, especially when compared to the requirements established for undergraduate students. In this class, graduate students are expected to demonstrate that they master all material covered in this class. Therefore, graduate students **are required to give a presentation and cannot drop any exam results**; their final letter grade will be based on the total points obtained on three exams and their presentation as follows:

A ≥ 90% (400 – 360 points), B 80 – 89% (320 – 359 points), C 70 – 79% (280 – 319 points), D 60 – 69% (240 – 271 points), F < 60% (< 240 points). The 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 Center for Access-Ability Resources (CAAR), the designated office on campus to provide services and administer exams with accommodations for students with disabilities. The CAAR office is located on the 4th floor of the University Health Services building (815-753-1303).