

# Chem 3786: Biochemistry 2

## Spring 2005

Lecture Times: MWF 11:00 - 11:50

Location: Ward Beecher 6030

Course Web site: [www.as.ysu.edu/~tdkim/3786/](http://www.as.ysu.edu/~tdkim/3786/)

### Instructor:

Dr. Thomas Kim, 6027 Ward Beecher  
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Office hours: MWF 10:00-11:00  
MW 1:00 - 2:00  
or by appointment

### Objective:

This course will focus on metabolic pathways and biological (genetic) information systems. Students should gain familiarity with chemical changes that occur in the course of these metabolic systems, how these chemical changes are induced and regulated, and how these chemical changes affect organisms as a whole.

### Prerequisites:

Chemistry 3785

### Required Texts:

Lehninger Principles of Biochemistry, 4<sup>th</sup> Edition, Nelson and Cox, Worth Publishers, 2005.

### Quizzes:

There will be six (6), 25 minute, scheduled quizzes during the term worth 25 points each for a sum of 150 points. Quizzes will be administered promptly at the beginning of each respective class period. No make up quizzes will be given.

### EXAMS:

There will be a **single comprehensive midterm exam** and a **comprehensive final exam** administered in this course. The midterm exam will be given during the class period on March 23 and will be worth 100 points. The final exam will be given at 10:30 am May 11. The final will be worth 150 points. No make up exams will be given.

### Letter Grades:

Letter grades will be assigned based according to the following point scale:

**A:** 360-400; **B:** 320-359; **C:** 280-319; **D:** 240-279; **F:** <240

### Incomplete Grade Policy:

According to the University's incomplete grade policy, if no formal grade change occurs within one year, an "I" automatically converts to an "F". If graduation occurs within the one-year period, the incomplete grade will be converted to an "F" before graduation.

# COURSE SCHEDULE- CHEM 3785

<u>Dates</u>	<u>Topics</u>	<u>Text Chapter</u>
Jan 19	Introduction; Gluconeogenesis	Ch 14.4
Jan 21-24	Principles of Metabolic Regulation	Ch. 15.1-15.4
Jan 26-31	Fatty Acid Catabolism	Ch. 17

<b>Feb 2</b>	<b>Quiz 1</b> (Covering Chapters 14.4, 15.1-15.4, 17)
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Feb 2-9	Amino Acid Metabolism	Ch. 18
Feb 11-16	Lipid Biosynthesis	Ch. 21

<b>Feb 18</b>	<b>Quiz 2</b> (Covering Chapters 18, 21)
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Feb 18-21	Lipid Biosynthesis	Ch. 21
Feb 23-Mar 2	Biosynthesis of Amino Acids, Nucleotides, etc.	Ch. 22

<b>Mar 4</b>	<b>Quiz 3</b> (Covering Chapters 21-22)
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Mar 7-11	Hormonal Regulation	Ch. 23
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<b>Mon Mar 14 - Fri Mar 18</b>	<b>Spring Break- No Classes</b>
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Mar 21	Genes and Chromosomes	Ch. 24
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<b>Wednesday Mar 23</b>	<b>Midterm Exam</b> (Covering Chapters 14.4, 15.1-15.4, 17-18, 21-23)
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Mar 25-28	Genes and Chromosomes	Ch. 24
Mar 30-Apr 4	DNA Metabolism	Ch. 25

<b>Apr 6</b>	<b>Quiz 4</b> (Covering Chapters 24-25)
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Apr 8-13	RNA Metabolism	Ch 26
Apr 15-20	Protein Metabolism	Ch 27

<b>Apr 22</b>	<b>Quiz 5</b> (Covering Chapters 26-27)
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April 22-25	Protein Metabolism	Ch 27
April 25-May 4	Gene Regulation	Ch 28

<b>May 6</b>	<b>Quiz 6</b> (Covering Chapters 27-28)
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<b>Wednesday May 11</b>	<b>FINAL EXAM</b> (10:30 am -12:30 pm)
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