

## ADVANCED NUTRITION I: Macronutrients

11:709:553

Fall 2006

Mon/Wed, 6<sup>th</sup> period (5:35 – 6:55 PM)  
Wed, 5<sup>th</sup> period (3:55 – 5:15 PM)

Cook-Douglass Lecture Hall 102  
114 Thompson Hall

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**NOTE: 513:301 or 403-404 (or equivalent) is a prerequisite for this course**

1	Sept. 6	Introduction – Carbohydrates, Fiber	Storch
2.	11	Digestion/Glucose Transport	Ricci
3.	13	Glycolysis and regulation	Ricci
4.	18	Fructose, Galactose, Glucokinase	Ricci
5.	20	Fate of pyruvate	Ricci
6.	25	Glycogen	Ricci
7.	27	Gluconeogenesis	Ricci
8.	Oct. 2	<b>EXAM (lectures 1-7)</b>	
9.	4	Protein requirements/Digestion	Dixon
10.	9	Absorption/B6/protein turnover	Dixon
11.	11	Fate of amino acids	Dixon
12.	16	Inter-organ flux of amino acids	Dixon
13.	18	Nitrogen excretion	Dixon
14.	23	<b>EXAM (lectures 9-13)</b>	
15.	25	Introduction to Lipids; Lipid consumption	Storch
16.	30	Digestion & absorption I	Storch
17.	Nov. 1	Digestion & absorption II; Lipoproteins I	Storch
18.	6	Lipoproteins II	Storch
19.	8	Lipid metabolism I	Storch
20	13	Lipid metabolism II; cholesterol metabolism	Storch
21.	15	Atherosclerosis; Fat & chronic disease	Storch
22.	20	Fat & chronic disease	Storch
	22	<b>THANKSGIVING break</b>	
23.	27	Fat & chronic disease; fat substitutes	Storch
24.	29	<b>EXAM (lectures 15-23)</b>	
25.	Dec. 4	Integrated metabolism-Starvation	Ricci
26.	6	Exercise/Alcohol metabolism	Storch
27.	11	Type I Diabetes	Dixon
28.	13	Obesity/Type II Diabetes/Syndrome X	Dixon

### FINAL EXAMINATION

Wednesday Dec 20, 3 :55 PM, 114 Thompson

**Lectures are presented on Monday and Wednesday, 6<sup>th</sup> period. In addition to the lectures there will be an 80 minute class per week (Wednesday 5<sup>th</sup> period), during which we will discuss specific topics in depth.**

Although different professors in the course will organize this section slightly differently you will be expected to:

- a. participate in the discussion
- b. complete a written assignment each week
- c. read a significant number of assigned references , and
- d. develop a broad understanding of each topic through discussion, reading and written work, and incorporate this understanding into your examination (essay) answers.

The final grade will be determined as follows:

Class participation	15 %
Written assignments	15 %
First exam	15 %
Second exam	14 %
Third exam	25 %
Final exam	16 %

Note: the exams cover material as outlined in the course schedule