

Syllabus Chem 371-001: Biochemistry II
Department of Chemistry and Biochemistry

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Lecture: Tu & Th 10:00-11:15 AM, Flanner Hall Auditorium 133
Discussion: Th 1:00 PM-1:50 PM, Mundelein 408
 Th 2:30 PM-3:20 PM, Mundelein 621
Office Hours: Tu 2:30-4:00 pm, Or by appointment.
Text Book: Biochemistry 7th Edition, by JM. Berg, JL. Tymoczko, L Stryer

**This documents is subject to correction and update upon finding errors.*

Schedule of Lectures:

#	Day	Date	Topic	Chapter
Energy Metabolism (Continued...)				
1.	Tu	1/13	Photosynthesis	19
2.	Th	1/15	Photosynthesis	20
3.	Tu	1/20	Glycogen Metabolism	21
4.	Th	1/22	Glycogen Metabolism	21
5.	Tu	1/27	Fatty Acid Metabolism	22
6.	Th	1/29	Fatty Acid Metabolism	22
7.	Tu	2/3	Test 1	19-22
Nitrogen Metabolism				
8.	Th	2/5	Protein Turnover/Amino Acid Catabolism	23
9.	Tu	2/10	Protein Turnover/Amino Acid Catabolism	23
10.	Th	2/12	Amino Acid Biosynthesis	24
11.	Tu	2/17	Amino Acid Biosynthesis	24
12.	Th	2/19	Nucleotide Biosynthesis	25
13.	Tu	2/24	Nucleotide Biosynthesis	25
14.	Th	2/26	Test 2	23-25
<i>MWF 3/2-7 Spring Break No Class</i>				
Biochemistry in Metabolic Control				
15.	Tu	3/10	The Biosynthesis of Membrane lipids and Steroids	26
16.	Tu	3/12	The Integration of Metabolism	27
17.	Th	3/17	The Integration of Metabolism	27
18.	Tu	3/19	Central Dogma	28-30
19.	Tu	3/24	The Control of Gene Expression Prokaryote	31
20.	Th	3/26	The Control of Gene Expression Eukaryotes	32
21.	Th	3/31	Test 3	28-32
Biochemistry in Physiology and Biomedicine				
22.	Th	4/2	Sensory System	33
23.	4/7	4/7	The Immune System	34
24.	Th	4/9	The Immune System	34
25.	Tu	4/14	Molecular Motors	35

26. Th	4/16	Drug Development	36
27. Tu	4/21	Review-1	
28. W	4/23	Review-2	19-36
29. Th	4/28	Final 1:00 PM-3:00 PM	19-36

Discussion Activities:

There will be an opportunity in all discussion sections for you to ask questions but most of these sections (except the ones the week before a test) will have activities planned for them, such as scientific design exercises. The discussions will be on Wednesdays and Fridays at 11:30 am. You should attend the one that you are registered for.

Week	Dates	Activity
1	1/15	Photosynthesis and Alternative Energy
2	1/22	Metabolic Diseases, Obesity, Diabetes.
3	1/29	Review
4	2/5	Homeostasis and stress response
5	2/12	Antimicrobial Approach.
6	2/19	Review
	2/26	No Discussion
	3/5	Spring Break
7	3/12	Lipids, underrated biomolecule
8	3/19	Cancer Biochemistry
9	3/26	Review
10	4/ 2	Epigenetics
11	4/9	Autoimmune Diseases and anti inflammation.
12	4/16	Neurodegenerative Diseases
	4/23	No Discussion

Grading Policy: There are 3 tests and 1 final examination during the course. There will be 100 points possible on each of the three 60-minute tests. There will be 200 points possible on the 2-hour final. The final examination will be comprehensive. If the final counts 200 in total, then the lowest score of the first three will be dropped. Alternately, the final can be scaled back to 100 while keep the first three scores in your total score. Either way the highest possible total will be 400.

The letter grade will be determined by **strictly and precisely** using the following scale:

Grading Sale:

A	360
A-	340
B+	320
B	300
B-	280
C+	260
C	240
C-	220
D+	200
D	180
F	160

Please arrange all your in semester travels to avoid the four exam dates. There will be NO make up exam if you miss it. Exam dates cannot be moved ahead of schedule for individuals either. All true emergencies, such us severe weather and family death will need written proof for special consideration.

Academic Integrity It should be obvious that all answers on examinations must arise from independent, honest efforts. Nothing less is acceptable at Loyola University Chicago. **Any student found cheating on any exam will receive an automatic “0” for the examination and that 0 cannot be dropped!** The name of the cheating students will be brought to the attention of the Chair of the Department and the Dean of the College, who will decide if further disciplinary action is necessary. Students should realize that the school misconduct record is **permanent!** During Test, the proctor will do whatever necessary to prevent students making the ultimate mistake including moving certain students to a new locations.

Classroom Behavior It is incumbent upon the students to maintain a professionalism and code of conduct appropriate with the course material and course enrollment. Rude, disruptive behavior (such as talking during lecture) will not be tolerated. While it is acceptable to use laptops or tablets for taking notes, using electronic device for reasons unrelated to class is not permitted. Students surfing Internet will be asked to leave the classroom. Video recording is not permitted.

Sakai: I plan to use the Sakai website (<https://sakai.luc.edu>) for all class notes and announcements. It is essential that you access the site regularly to do well in this class.