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

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Office Hours: Monday 3:00-400 pm, Wednesday 3:00-4:00 pm Or by appointment
Lecture: MWF 1:40-2:30 pm, Dumbach Hall 125
Discussion: Wednesday 11:30 AM-12:20 PM, LSB 212 for Chem 371-002
OR Friday 11:30 AM-12:20 PM, FH 7 (Lower Level)
Text Book: Biochemistry 7th Edition, by JM. Berg, JL. Tymoczko, L Stryer

Course Prerequisites: CHEM 370. Restricted to Biochemistry Majors

Schedule of Lectures:

#	Day	Date	Topic	Chapter
1.	M	1/14	Photosynthesis	19
2.	W	1/16	Photosynthesis	20
3.	F	1/18	Glycogen Metabolism	21
	M	*1/23*	*MLK Day No Class*	
4.	W	1/23	Glycogen Metabolism	21
5.	F	1/25	Fatty Acid Metabolism	22
6.	M	1/28	Fatty Acid Metabolism	22
7.	W	1/30	Protein Turnover/Amino Acid Metabolism	23
8.	F	2/1	Protein Turnover/Amino Acid Metabolism	23
9.	M	2/4	Biosynthesis of Amino Acid	24
10.	W	2/6	Nucleotide Biosynthesis	25
11.	F	2/8	Review for Test 1	19-25
12.	M	2/11	Test 1	
13.	W	2/13	The Biosynthesis of Membrane lipids and Steroids	26
14.	F	2/15	The Biosynthesis of Membrane lipids and Steroids	26
15.	M	2/18	DNA replication and Repair	28
16.	W	2/20	DNA recombination	28
17.	F	2/22	RNA synthesis and Processing	29
18.	M	2/25	RNA synthesis and Processing	29
19.	W	2/27	Protein Synthesis	30
20.	F	3/1	Protein Synthesis	30
	MWF	*3/3-9*	*Spring Break No Class*	
21.	M	3/11	The Control of Gene Expression Prokaryotes	31
22.	W	3/13	The Control of Gene Expression Prokaryotes	31
23.	F	3/15	The Control of Gene Expression Eukaryotes	32
24.	M	3/18	The Control of Gene Expression Eukaryotes	32

25. W	3/20	The Control of Gene Expression Eukaryotes		32
26. F	3/22	Review for Test 2		26-32
27. M	3/25	Test 2		
28. W	3/26	Sensory System		33
FM	*3/28-4/1 Easter Holiday No Class*			
29. W	4/3	Sensory System		33
30. F	4/5	Sensory System		33
31. M	4/8	The Immune System		34
32. W	4/10	The Immune System		34
33. F	4/12	The Immune System		34
34. M	4/15	Molecular Motors		35
35. W	4/17	Molecular Motors		35
36. F	4/19	Drug Development		36
37. M	4/22	Drug Development		36
38. W	4/24	Review for Test 3		33-36
39. F	4/26	Review for Test 3		19-33
40.	Test 3			

Grading Policy: There are 3 tests and a final examination during the course. There will be 100 points possible on each test and 200 on the final. The final examination will be 25% on new material and 75% on the material covered in Tests 1 to 3. If one of the regular examinations is the lowest score, it will be dropped and the final will count 200 points. If the final examination is the lowest score, then all five examinations will count 100 points each. In addition there will be homework problems worth at total of 50 points that will be graded only on the basis of being honestly attempted and turned in on time. You may work these problems in groups but I would like written answers from each you individually. Finally, there will be an additional 50 points assigned to the discussion sections. This will be graded on participation in the Discussion Section activities. Thus the course grade will be determined on the basis of 500 possible points. No make-up tests will be given. If you miss a test for any reason, then your final will automatically count 200 points. If you miss more than one test a make-up examination will be given at my discretion. Minimally, a written doctor's or judge's note and notification prior to the quiz (via phone or e-mail) will be needed for any missed test to be made up.

Note that the last day to with draw from the course with out getting a WF is Friday,Nov. 2.

It should be obvious that all answers on examinations must arise from independent, honest efforts. Nothing less is acceptable at Loyola. Thus, any student found cheating on any quiz will receive an automatic "0" for F at examination and his (her) name 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.

Blackboard: I plan to use the Blackboard website (blackboard.luc.edu) for all class notes and announcements. Please ask me for a handout for instructions on how to use this site if you are not already familiar with it. It is essential that you access the site regularly to do well in this class.

Help Sessions: I will be available for the hour before each exam to answer last minute questions you have on the material. These help session will be held in the lecture room unless it is occupied by another class. This is in addition to the regular office hours.

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 10:25 am. You should attend the one that you are registered for.

Week	Dates	Activity
1	1/16 & 18	Photosynthesis and Alternative Energy
2	1/23 &25	Metabolic Diseases, Obesity, Diabetes.
3	1/30 & 2/1	Nutritional and BEYIOND.
4	2/6 & 8	Antimicrobial Approach.
5	2/13 & 15	Nuleotides, source.
6	2/20 & 22	lipids, underrated biomolecule.
7	2/27 & 3/1	Chemistry of Genetics
8	3/13 & 15	RNA and short RNA, RNAi.
9	3/20 & 22	Protein Synthesis
10	3/27 & 29	No Discussion
11	4/3 &5	From Microarray to gene therapy.
12	4/10 & 12	Chemical foundation of the Biological function.
13	4/17 & 19	Chemical foundation o fthe Biological function.
14	4/24 & 26	Drug Design or Discovery?