

SYLLABUS
BCM 476 Biochemistry II (3 credits)
Spring 2017

Time: 9:30 pm – 10:25 pm Monday, Wednesday and Friday. Location: LSB 105

Prof. Ivan Korendovych

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Office hours: Wednesday 10:30 am – 11:30 am and by appointment.

Teaching Assistant: Stephen Olubusayo Ajayi (soajayi@syr.edu)

Recitation/Office Hours: 7-9 pm on Monday in LSB 214.

Required Textbook Biochemistry (8th edition) by Berg JM, Tymoczko JL, and Stryer L (2015). The bookstore stocks the unbound version of the text, bundled together with online access to the Sapling Learning Environment.

Required Sapling Online Homework. This is bundled together with the textbook at the bookstore. If you purchase the textbook separately, you will have to purchase access to Sapling Homework separately.

Summary and Goals of the Class. This is the second course in the Biochemistry course sequence. BCM 475 (Biochemistry I) is a pre-requisite for this course. This course covers a number of important biological and biomedical topics. It is meant to prepare you for careers in biomedical professions (graduate school, medical school, lab technician, etc.).

Exams and Grading. There will be a total of two midterm in-class exams (25% of the grade each) and a cumulative final exam (35% of the overall grade). Homework will account for 15% of the overall grade. Exams will cover topics discussed in lectures.

a) *Examination Policies:* The dates and times for the exams are as indicated in the syllabus. There is no possibility to make up an exam in BCM 475. A student presenting a valid excuse (defined below) who has missed one exam, can have the score of the remaining exam to be used as the score for the missed exam. A student with a second "miss" will receive a grade of zero for the additional missed exam. In order to receive a passing grade in BCM 475, a student must take the comprehensive final exam. A student who fails to take the comprehensive final exam at the scheduled date and time, may gain the right to take a make-up final exam (2 hours in length) provided that a valid excuse is presented.

A valid excuse: A valid excuse is a written and dated document that is presented to the instructor within three days of the missed exam. A valid medical excuse must be signed by a physician and it must be evident from the excuse that the student was unable to write the exam at the specified date/time. A valid student-athlete excuse is an official document provided to the instructor by the

Athletic Office stating the reason for the absence. The student-athlete excuse must be provided within the first two weeks of class in order for it to be valid.

b) *Sapling Online homework*: Weekly assignments will be given on Mondays consisting of around 20 questions. Assignments will be due on Sundays at 9 pm. These assignments are meant to test your understanding of the material covered in class. The assignments are to be completely entirely online using Sapling Learning. A few questions on exams will be derived from Sapling online homework, so it is imperative that you complete these assignments on your own. Difficult problems will be reviewed during recitation sessions on Mondays at 7 pm. Note that if you experience any technical difficulties, please email support@saplinglearning.com explaining the issue.

Only written regrade requests will be accepted. Regrade requests will be only entertained if submitted within 48 hours after the exams have been returned. Briefly state your reason(s) for requesting the regrade. The regrade request will be considered carefully but the entire exam will be regraded regardless of whether additional points are awarded on the request. Only examinations that were **written in ink** will be accepted for regrades.

No late homework will be accepted under any circumstances; emergency situations will be dealt on a case-by-case basis.

Academic Integrity. The Syracuse University Academic Integrity Policy holds students accountable for the integrity of the work they submit. Students should be familiar with the Policy and know that it is their responsibility to learn about instructor and general academic expectations with regard to proper citation of sources in written work. The policy also governs the integrity of work submitted in exams and assignments as well as the veracity of signatures on attendance sheets and other verifications of participation in class activities. Serious sanctions can result from academic dishonesty of any sort.

Religious Holidays observation. Students will have update access to the notification form through MySlice beginning the first day of classes. It will be available through the end of the second week of class. Students must notify the instructor by the end of the second week of classes when they will be observing their religious holiday(s) to make the appropriate arrangements.

Students with Disabilities. If you believe that you need accommodations for a disability, please contact the Office of Disability Services (ODS) at <http://disabilityservices.syr.edu>, located at 804 University Avenue, room 309, or call 315-443-4498 for an appointment to discuss your needs and the process for requesting accommodations. ODS is responsible for coordinating disability-related accommodations and will issue students with documented disabilities “Accommodation Authorization Letters”, as appropriate. Since accommodations may require early planning and generally are not provided retroactively, please contact ODS as soon as possible.

Our community values diversity and seeks to promote meaningful access to educational opportunities for all students. Syracuse University and I are committed to your success and to supporting Section 504 of the Rehabilitation Act of 1973 as amended and the Americans with Disabilities Act (1990). This means that in general no individual who is otherwise qualified shall be excluded from participation in, be denied benefits of, or be subjected to discrimination under any program or activity, solely by reason of having a disability.

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Tentative Schedule (However dates for all exams are final)

Wednesday, Jan 18	Ch.19, Light Reactions of Photosynthesis
Friday, Jan 20	Ch.19. Light Reactions of Photosynthesis (cont.)
Monday, Jan 23	No class.
Wednesday, Jan 25	Ch.20. Calvin Cycle
Friday, Jan 27	Ch.20. Calvin Cycle (cont.)
Monday, Jan 30	Ch.23. Protein Turnover
Wednesday, Feb 1	Ch.23. Protein Turnover (cont.)
Friday, Feb 3	Ch.23. Urea Cycle
Monday, Feb 6	Ch.24. Biosynthesis of Amino Acids
Wednesday, Feb 8	Ch.24. Biosynthesis of Amino Acids (cont.)
Friday, Feb 10	Ch.25. Nucleotide Biosynthesis
Monday, Feb 13	Ch.25. Nucleotide Biosynthesis (cont.)
Wednesday, Feb 15	Ch.26. Biosynthesis of Glycerolipids
Friday, Feb 17	Ch.26. Phospholipid Biosynthesis
Monday, Feb 20	Ch.26. Biosynthesis of Isoprenoids
Wednesday, Feb 22	Ch.26. Biosynthesis of Cholesterol & Steroids
Friday, Feb 24	Ch.28. DNA Replication, Repair and Recombination
Monday, Feb 27	Ch.28. DNA Replication, Repair and Recombination
Wednesday, Mar 1	Ch.28. DNA Replication, Repair and Recombination
Friday, Mar 3	EXAM 1 (Covers Ch. 19, 20, 23-26)
Monday, Mar 6	Ch.29. RNA Synthesis and Processing
Wednesday, Mar 8	Ch.29. RNA Synthesis and Processing (cont.)
Friday, Mar 10	Ch.30. Protein Synthesis
Monday, Mar 20	Ch.30. Protein Synthesis (cont.)
Wednesday, Mar 22	Ch.30. Protein Synthesis (cont.)
Friday, Mar 24	Ch. 31. The control of gene expression in prokaryotes
Monday, Mar 27	Ch. 31. The control of gene expression in prokaryotes (cont.)
Wednesday, Mar 29	Ch. 31. The control of gene expression in eukaryotes
Friday, Mar 31	Ch. 32. The control of gene expression in eukaryotes (cont.)
Monday, Apr 3	Ch. 32. The control of gene expression in eukaryotes (cont.)
Wednesday, Apr 5	EXAM 2 (Covers Ch. 28-32)
Friday, Apr 7	Ch. 33. Sensory systems
Monday, Apr 10	Ch. 33. Sensory systems
Wednesday, Apr 12	Ch. 34. The immune system
Friday, Apr 14	Ch. 34. The immune system
Monday, Apr 17	Ch. 35. Molecular Motors
Wednesday, Apr 19	Ch. 36. Drug Development
Friday, Apr 21	Ch. 36. Drug Development
Monday, Apr 24	SPECIAL TOPICS/review/catch-up
Wednesday, Apr 26	SPECIAL TOPICS/review/catch-up
Friday, Apr 28	SPECIAL TOPICS/review/catch-up
Monday, May 1	SPECIAL TOPICS/review/catch-up

Tuesday, May 9

CUMULATIVE FINAL EXAM, 8:00 AM-10:00 AM, LSB 105. Covers ALL