

Class: M/W/F 10:00 a.m.-10:50 a.m. in Wheatley W-01-005.

Text: Voet D., Voet J. G., Pratt C. W., Fundamentals of Biochemistry Life at the Molecular Level, 3th edition, John Wiley & Sons, Inc., New York, 2008 (ISBN#: 9780470279892 for the three-hole binder ready version).

Prerequisite: Bio 111 and Chem 254 (or Chem 252+256). If you do not have this prerequisite, you should not be in the class. Talk to the instructors first.

Instructors:

Dr. Manickam Sugumaran

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Course website: <http://alpha.chem.umb.edu/chemistry/biochm383/>

Proposed class schedule: (subject to change, excluding exam dates)

Date	Topic	Chapter	Instructor(s)
SEP 9 W	Announcements, Introduction to the Chemistry of Life, Water	1, 2	Sugumaran
SEP 11 F	Nucleotides, Nucleic Acids, and Genetic Information	3	Sugumaran
SEP 14 M	Nucleotides, Nucleic Acids, and Genetic Information	3	Sugumaran
SEP 16 W	Amino Acids	4	Sugumaran
SEP 18 F	Amino Acids	4	Sugumaran
SEP 21 M	Proteins: Primary Structure	5	Sugumaran
SEP 23 W	Proteins: Primary Structure	5	Sugumaran
SEP 25 F	Proteins: Three-Dimensional Structure	6	Sugumaran
SEP 28 M	Proteins: Three-Dimensional Structure	6	Sugumaran
SEP 30 W	Exam #1 (Chapters 1-6)		Sugumaran
OCT 2 F	Protein Function: Myoglobin and Hemoglobin, Muscle Contraction, and Antibodies	7	Sugumaran
OCT 5 M	Protein Function: Myoglobin and Hemoglobin, Muscle Contraction, and Antibodies	7	Sugumaran
OCT 7 W	Carbohydrates	8	Sugumaran
OCT 9 F	Carbohydrates	8	Sugumaran
OCT 12 M	<i>Columbus Day Holiday</i>		
OCT 14 W	Enzymatic Catalysis	11	Sugumaran
OCT 16 F	Enzymatic Catalysis	11	Sugumaran
OCT 19 M	Enzyme Kinetics regulation	12	Sugumaran
OCT 21 W	Enzyme Kinetics, Inhibition, and Control	12	Sugumaran
OCT 23 F	Exam #2 (Chapters 7, 8, 11, 12)		Sugumaran
OCT 26 M	Lipids and Biological Membranes	9	Torok
OCT 28 W	Lipids and Biological Membranes	9	Torok
OCT 30 F	Membrane Transport	10	Torok
NOV 2 M	Membrane Transport	10	Torok
NOV 4 W	Biochemical Signaling	13	Torok
NOV 6 F	Biochemical Signaling	13	Torok
NOV 9 M	Introduction to Metabolism	14	Torok
NOV 11 W	<i>Veterans Day Holiday</i>		
NOV 13 F	Exam #3 (Chapters 9, 10, 13)		Torok
NOV 16 M	Introduction to Metabolism	14	Torok
NOV 18 W	Glucose Catabolism	15	Torok
NOV 20 F	Glucose Catabolism	15	Torok
NOV 23 M	Glycogen Metabolism and Gluconeogenesis	16	Torok
NOV 25 W	Glycogen Metabolism and Gluconeogenesis	16	Torok
NOV 26-29 Th-Su	<i>Thanksgiving Recess</i>		

NOV 30 M	Glycogen Metabolism and Gluconeogenesis	16	Torok
DEC 2 W	Citric Acid Cycle	17	Torok
DEC 4 F	Exam #4 (Chapters 14, 15, 16)		Torok
DEC 7 M	Citric Acid Cycle	17	Torok
DEC 9 W	Electron Transport and Oxidative Phosphorylation	18	Torok
DEC 11 F	Electron Transport and Oxidative Phosphorylation	18	Torok
DEC 14 M	<i>Classes End – Catch-up/Review</i>		Sugumaran, Torok
DEC 16-22 W-Tu	Final Exam (Chapters 1-18)		Sugumaran, Torok
DEC 23 W	<i>Snow make-up day (if needed)</i>		

Homework:

Selected practice problems will be posted on the course website regularly.

Absence policy and exams:

Attendance to class is compulsory. Four hourly exams and a cumulative final exam are scheduled for the semester. The lowest score from the four hourly exams will be dropped. There are no make-up exams. Your missed hourly exam will be your dropped exam. In case of any serious problems, contact us in advance.

Grading:

The final grade is based on the three best hourly exams (3X100 points total) and the final exam (200 points total). The grade equivalences are as follows:

<i>Points Earned</i>	<i>%</i>	<i>Grade</i>
500-450	>90	A
449-430	>86	A-
429-410	>82	B+
409-390	>78	B
389-370	>74	B-
369-350	>70	C+
349-330	>66	C
329-310	>62	C-
309-290	>58	D+
289-270	>54	D
269-250	>50	D-
below 250	<50	F

Accommodations:

Section 504 of the Americans with Disabilities Act of 1990 offers guidelines for curriculum modifications and adaptations for students with documented disabilities. If applicable, students may obtain adaptation recommendations from the Ross Center for Disability Services, (Campus Center, Floor 02, Room 02010, Phone: 617-287-7430). The student must present these recommendations and discuss them with each professor within a reasonable period, preferably by the end of Drop/Add period.

Student Conduct and Academic Honesty:

Students are required to adhere to the University Policy on Academic Standards and Cheating, to the University Statement on Plagiarism and the Documentation of Written Work, and to the Code of Student Conduct. Please, refer to the following websites for the Code and further UMB policies:

http://www.umb.edu/student_affairs/code.html

http://www.umb.edu/students/student_rights/index.html

<http://www.umb.edu/academics/undergraduate/office/policies.html>