

BIOCHEMISTRY

16:115:511:01

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Course Information:

Molecular Biology and Biochemistry 694:407-408 is offered as the primary lecture course for students in the Molecular Biology and Biochemistry major, as well as for non-majors who wish to enroll in a modern course in this discipline. MBB 115:511 mainly serves graduate students who are not Biochemistry majors.

LECTURE SCHEDULE

Topics	Instructors
Foundations of Biochemistry	Deis & Severinov
Water (pH and buffers)	Severinov
Amino Acids, Peptides, and Proteins	Severinov
Proteins, Lab Methods, Bioinformatics	Severinov
3D Structure of Proteins	Severinov
Protein Function – Hemoglobin	Severinov
Enzymes	Severinov
Membrane Transport	Severinov
Protein Turnover, Signal Transduction	Severinov
Carbohydrates	Deis
Lipids	Deis
Bioenergetics, Coenzymes	Deis
Glycolysis, Gluconeogenesis	Deis
Pentose Phosphate	Deis
Glucose and Glycogen	Deis
Citric Acid Cycle	Deis
Electron Transport, Oxidative Phosphorylation	Deis
Lipid Metabolism – Catabolism, Ketogenesis	Deis
Lipid Metabolism – Biosynthesis	Deis
Light Reactions of Photosynthesis	Deis
Amino Acid Catabolism & the Urea Cycle	Deis
Amino Acid Biosynthesis	Deis
Nucleotides & Nucleic Acids	Severinov
Nucleotide Metabolism	Deis