

BIO 375: Biochemistry
Fall 2026 Lab Syllabus
 (subject to change)
 Lab manuals posted on Moodle

Date	LAB EXERCISE
Sept. 2	NO LAB
Sept. 9	• Getting to know each other and our lab space (read lab policies) • Pipet Olympics (read appendices 1 and 2) • Learning how to write scientific papers • Introduction to Blood Cells Lab (please read introduction in posted manual)
Sept. 16	• Blood Cells Lab, Part I: Extract proteins
Sept. 23	• Viewing protein structures in 3D – myoglobin (please download PyMol on your laptop and bring to lab)
Sept. 30	• Blood Cells Lab, Part II: Protein assays
Oct. 7	• Blood Cells Lab, Part III: SDS-PAGE analysis • Introduction to Enzyme Kinetics Lab (please read introduction in posted manual) <i>(Blood Cells lab report due Wed, 10/21)</i>
Oct. 14	FALL BREAK – NO LAB
Oct. 21	• Enzyme Kinetics Lab, Part I- Determine the effect of varying enzyme concentration on initial velocity
Oct. 28	• Enzyme Kinetics Lab, Parts II and III ◦ Enzyme kinetics – Km and Vmax determination ◦ Inhibitor studies <i>(Enzyme kinetics lab report due Wed, 11/4)</i>
Nov. 4	• Sugars lab • Introduction to DHFR lab and induction of DHFR in <i>E. coli</i> (please read introduction in posted manual) <i>(Sugars lab report due Wed, 11/11)</i>
Nov. 11	• DHFR lab, Part I: Cell lysis and affinity column purification
Nov. 18	• DHFR lab, Part II: Protein assays and specific activity calculations
Nov. 25	DAY BEFORE THANKSGIVING – NO LAB
Dec. 2	• DHFR lab, Part III: SDS-PAGE analysis <i>(DHFR lab report due Th, 12/10 in lecture)</i>
Dec. 9	NO LAB – office hours with Mia