Phys 161 Fall 2026 Schedule

This schedule may change. Students will be notified of changes as quickly as is reasonable.

Wk #	Monday's Date	Lecture Topics & Links	Lab Topics & Links
1	08/17	Ch 1 & 3 from workbook Sig figs, units, vectors, etc • Sci Notation Tut(w/ vids) • Orders of mag • Uncertainty in Measurement Tut • How physicists usually do dimensional analysis here • Robust Error Propagation (could be a lab assignment) • Vector Phet • http://physics.bu.edu/~duffy/HTML5/vector_spin.html Try 10, 8, 0.32, 0.64, 1, 2800	1D Motion with Tracker (collect data, start ppt draft) Coding fools might like to watch this vid & how to get data from glowscript into Excel This playlist shows tricks for using Excel, PPT, etc More Phys 161 lab links
2	08/24 08/28 = Last Drop with refund 08/31 = Last Drop no W	Ch 2 from workbook • 1D kinematics tutorial from The Physics Classroom • Moving Man • Projectile Tut • Projectile Phet • My cop and speeder sim • Vid: Full bowling-ball feather drop • Vid: slo-mo just the drop Duffy simulations (entire list): • Graph Matching • Landing a rocket • Ranking acceleration (move mouse slowly) • Galileo's ramp	Prepare presentation in lab; come in with draft ready. More Phys 161 lab links This playlist shows tricks for using Excel, PPT, etc
3	08/31	Ch 4 from workbook Use glowscript files in phys161solns • 2D.constant.accel.with.arrows.n.plot • Above but in component form • Visualization of workbook problem 4.19 • My relative velocity visualization • Boat crossing river Duffy Simulations • Race on moving walkway • Monkey hunter	Present to class
4	09/07 **Holiday Mon 09/07 Labor Day**	Ch 5 • Some tricky FBDs (scroll down to see them) • Slo mo vid of broomstick on wine glasses • Short N3 Law Quiz with answers	**Old Exams & Sol'ns** Practice like real exams. Do NOT use solutions. Time yourself (2 hrs). Then grade yourself

5	09/14 **Exam 1** **Wed 09/16** **Ch 1-4**	Ch 5 • My Atwood's sim • Block and Tackle • More N3 Law quiz with answers • Force Basics Phet Duffy: • Ranking forces (move mouse slowly)	Data Aq Oral Presentation 2 Coding fools might read these two documents: One-block Prep for two block Two block starter code How to get data from glowscript into Excel
6	09/22	Ch 6 • My mass on stiff rod sim • Frames of reference vid • My sim: angled applied force on block on flat surface Duffy: • Car on Banked turn	Prep presentations Playlist for Excel, PPT, etc More Phys 161 lab links
7	09/28	Ch 6-7 • Tre's Multi-Path Sim	Present to class
8	10/05	Ch 7-8 • Hooke's Law Phet • Skate park Phet • Masses & springs Phet • Pendulum Phet • Lennard-Jones Phet Duffy: • Plot energy vs time: block down ramp hitting spring	Work-Energy Activity Submit PDF on Canvas
9	10/12	Ch 8-9 • Collisions Phet Duffy: • Motion of center of mass	**Old Exams & Sol'ns**
10	10/19 **Exam 2** **Mon 10/19** **Ch 5-8**	Finish Ch 9 & start Ch 10	Data Aq for Oral Presentation 3 Long slow vid on rotation in codes Excellent students b4 you needed this Pendulum starter code Pendulum training vid How to get data from glowscript into Excel
11	10/26	Ch 10 • Crazy rolling motion visualizer • Rolling with slipping visualization	Prep presentations Playlist for Excel, PPT, etc More Phys 161 lab links

12	11/02 11/06 = Last Drop with W	Ch 11 • My sim: angular momentum for straight line motion • Vid: CD players in space as gyroscope • Full treatment of gyros (beyond the scope of our course) • Veritasium bullet-block off-axis • Bullet into blocks (on- vs off-axis)	Present to Class
13	11/09 **Holiday** **11/11** **Veterans Day**	Ch 12 – Statics Duffy: • Hinged rod	**Finish Ch 12 in lab!** If time permits go over **Old Exams & Sol'ns**
14	11/16	Ch 13 – Universal Gravitation • Gravity Orbits Phet • My sim: escape velocity • Black holes 1 • Black holes 2 • Black hole simulated visuals	Gravitational Coding Lab Find quiz on Canvas Brief training vid
15	11/23 **Holiday** **11/26-28** **Thanksgiving**	**Exam 3, Mon 11/23, Ch 9-12** WED Watch video lectures on Ch 13 & 14 and do hmwk.	**No lab due to holiday**
16	11/30	Ch 14 – Fluids & Pressure • Decent Bernoulli versus Coanda video • NASA Airfoil Simulator • NASA Lift Lie #1 • NASA Lift Lie #2 • NASA Lift Lie #3 • NASA's explains lift (force from turning a moving fluid) • Weird Russian video on Tea Leaves (@ 3:30 is demo) • Hardcore airfoils page • Slow Mo Guys Droplet Collisions • Collection of conceptual physics questions **Thurs 12/03** **last day of instruction**	Catch-up Lecture Fluid Demos **Thurs 12/03** **last day of instruction**
17	12/07	**Cumulative Final Exam** Mon. Dec 7, 11 a.m. to 1 p.m., M310	