

|    |              |     | <b>Phys101 Calendar (Subject to Change)</b>        |                    |
|----|--------------|-----|----------------------------------------------------|--------------------|
| wk | Date         | Lec | Topics                                             | Ref                |
| 1  | Fri 01/07    | 1   | Course info, introduction                          | Notes, Ch1         |
|    | Mon 01/10    | 2   | 1-D Kinematics: velocity, speed and acceleration   | Ch2                |
|    | Wed 01/12    | 3   | Vectors, projectile motion                         | 3-1,2,3,4,5        |
| 2  | Fri 01/14    | 4   | Projectile motion, relative motion                 | 3-6,7,8            |
|    | Mon 01/17    | 5   | Newton's laws of motion, Forces, Free body diagram | 4-1,2,3,4,5,6,7    |
|    | Wed 01/19    | 6   | Free body diagram, Friction                        | 4-7,8              |
| 3  | Fri 01/21    | 7   | Circular motion                                    | 5-1,2,3,5,6        |
|    | Mon 01/24    | 8   | Gravitation                                        | 5-6,7,8            |
|    | Wed 01/26    | 9   | Examples                                           |                    |
| 4  | Fri 01/28    | 10  | Work, Dot product, the Work-energy principle       | 6-1,2,3            |
|    | Mon 01/31    | 11  | Potential energy and conservative forces           | 6-4,5              |
|    | Wed 02/02    | 12  | Conservation of Mechanical energy, Power           | 6-6,7,8,9,10       |
| 5  | Fri 02/04    | 13  | Linear momentum, collisions, centre of mass        | 7-1,2,3            |
|    | Mon 02/07    | 14  | Linear momentum, collisions, centre of mass        | 7-4,5,6,7,8,9,10   |
|    | Wed 02/09    | 15  | Examples                                           |                    |
| 6  | Fri 02/11    |     | Midterm#1                                          |                    |
| 7  | 02/14 -02/18 |     | Reading Break                                      |                    |
|    | Mon 02/21    | 16  | Rotational Motion                                  | 8-1,2,3            |
|    | Wed 02/23    | 17  | Rotational dynamics                                | 8-4,5,6            |
| 8  | Fri 02/25    | 18  | Rotational kinetic energy and angular momentum     | 8-6,7,8            |
|    | Mon 02/28    | 19  | Statics                                            | 9-1,2              |
|    | Wed 03/02    | 20  | Statics, Elasticity, stress and strain             | 9-3,4,5            |
| 9  | Fri 03/04    | 21  | Fluids: Pressure, Pascal's principle               | 10-1,2,3,4,5,6     |
|    | Mon 03/07    | 22  | Buoyancy                                           | 10-6,7             |
|    | Wed 03/09    | 23  | Examples                                           |                    |
| 10 | Fri 03/11    |     | Midterm#2                                          |                    |
|    | Mon 03/14    | 24  | Fluid flow and Bernoulli's equation                | 10-8,9,10          |
|    | Wed 03/16    | 25  | Viscosity and Poiseuille's law                     | 10-11,12           |
| 11 | Fri 03/18    | 26  | Fluid flow and Bernoulli's equation                | 10-8,9,10          |
|    | Mon 03/21    | 27  | Viscosity and Poiseuille's law                     | 10-11,12           |
|    | Wed 03/23    | 28  | Simple harmonic motion                             | 11-1,2,3           |
| 12 | Fri 03/25    | 29  | Pendula and other oscillations                     | 11-4,5             |
|    | Mon 03/28    | 30  | Waves                                              | 11-7,8,9,10,11,16. |
|    | Wed 03/30    | 31  | Waves                                              | 11-11,12,13,16     |
| 13 | Fri 04/01    | 32  | Sound                                              | 12-1,2,7           |
|    | Mon 04/04    | 33  | Sound                                              | 12-1,2,7           |
|    | Wed 04/06    | 34  | Review                                             |                    |
|    | Fri 04/08    | 35  | Review                                             |                    |
| 14 | Mon 04/11    | 36  | No class                                           |                    |
|    | Wed 04/20    |     | Final Exam                                         |                    |