

| <b>Physics 218<br/>Lab Schedule, Spring 2019</b> |   |                            |
|--|---|----------------------------|
| <b>Date</b>                                      | <b>Experiment</b>                               | <b>Report Due</b>          |
| <b>Jan.</b> 31                                   | Introduction                                    |                            |
| <b>Feb.</b> 7                                    | Numerical Simulations in <i>Mathematica</i>     |                            |
| 14   | The Pendulum                                    | <i>Mathematica</i> Report  |
| 21   | The Torsional Oscillator: Part 1                | Pendulum Report            |
| 28   | The Torsional Oscillator: Part 2                |                            |
| <b>Mar.</b> 7                                    | Introduction to Numerical Simulations in Python | Torsion 1 Report           |
| 14   | Resonance in AC Circuits                        | Torsion 2 Report           |
| 18–22  | <i>Spring Break</i>                             |                            |
| 28   | Simulating a Damped, Driven Oscillator          | Python Report              |
| <b>Apr.</b> 4                                    | Simulations <i>continued</i>                    | Resonance Report           |
| 11   | Coupled Oscillators                             | Duffing Report             |
| 18   | Coupled Oscillators <i>continued</i>            |                            |
| 25   | AC Circuits and Filters                         | Coupled Oscillators Report |
| <b>May</b> 2                                     | AC Circuits and Fourier Analysis                | AC Report                  |
| 9  | Fourier Analysis <i>continued</i>               |                            |
| 13   |   | Fourier Report             |

January 28, 2019