

| Week | Day       | Date   | Lecture                                                        | Reading      | Topic                              | Tutorial                     | Lab                                             |
|------|-----------|--------|----------------------------------------------------------------|--------------|------------------------------------|------------------------------|-------------------------------------------------|
| 1    | W         | 04-Jan | 1                                                              | 15.1 - 15.2  | Periodic Motion - I                | No tutorial                  | No Lab                                          |
|      | Th(night) | 05-Jan | Lab workshop: Introduction to uncertainties and report writing |              |                                    |                              |                                                 |
|      | F         | 06-Jan | 2                                                              | 15.3 - 15.5  | Periodic Motion - II               |                              |                                                 |
| 2    | M         | 09-Jan | 3                                                              | 15.6 - 15.8  | Periodic Motion - III              | Superposition and reflection | Lab A1: Wave on a string - theoretical modeling |
|      | W         | 11-Jan | 4                                                              | 16.1 - 16.2  | Waves in 1D - I                    |                              |                                                 |
|      | Th(night) | 12-Jan | No night class                                                 |              |                                    |                              |                                                 |
|      | F         | 13-Jan | 5                                                              | 16.3 - 16.5  | Waves in 1D - II                   |                              |                                                 |
| 3    | M         | 16-Jan | Holiday                                                        |              |                                    | Reflection and transmission  | Lab A2: Wave on a string - model testing        |
|      | W         | 18-Jan | 6                                                              | 16.6 - 16.9  | Waves in 1D - III                  |                              |                                                 |
|      | Th(night) | 19-Jan | Lab workshop: Introduction to Python                           |              |                                    |                              |                                                 |
|      | F         | 20-Jan | 7                                                              | 17.1 - 17.3  | Waves in 2D and 3D - I             |                              |                                                 |
| 4    | M         | 23-Jan | 8                                                              | 17.4 - 17.6  | Waves in 2D and 3D - II            | 2-source interference        | Lab A3: Wave on a string - emperical modeling   |
|      | W         | 25-Jan | 9                                                              | 17.7 - 17.8  | Waves in 2D and 3D - III           |                              |                                                 |
|      | Th(night) | 26-Jan | Exam prep./reflec.                                             |              |                                    |                              |                                                 |
|      | F         | 27-Jan | 10                                                             | 33.1 - 33.2  | Optics - I                         |                              |                                                 |
| 5    | M         | 30-Jan | 11                                                             | 33.3 - 33.4  | Optics - II                        | Wave properties of light     | Lab A4: Presentation                            |
|      | W         | 01-Feb | 12                                                             | 33.5 - 33.6  | Optics - III                       |                              |                                                 |
|      | Th(night) | 02-Feb | Midterm 1                                                      |              |                                    |                              |                                                 |
|      | F         | 03-Feb | 13                                                             | 33.7         | Optics - IV                        |                              |                                                 |
| 6    | M         | 06-Feb | 14                                                             | 34.1 - 34.3  | Wave and Particle Optics - I       | Multiple-slit interference   | Lab B1: Wave optics - theoretical modeling      |
|      | W         | 08-Feb | 15                                                             | 34.4 - 34.6  | Wave and Particle Optics - II      |                              |                                                 |
|      | Th(night) | 09-Feb | No night class                                                 |              |                                    |                              |                                                 |
|      | F         | 10-Feb | 16                                                             | 34.7 - 34.8  | Wave and Particle Optics - III     |                              |                                                 |
| 7    | M         | 13-Feb | 17                                                             | 34.9 - 34.10 | Wave and Particle Optics - IV      | Single-slit diffraction      | Lab B2: Wave optics - model testing             |
|      | W         | 15-Feb | 18                                                             | 18.1 - 18.3  | Fluids - I                         |                              |                                                 |
|      | Th(night) | 16-Feb | Exam prep./reflec.                                             |              |                                    |                              |                                                 |
|      | F         | 17-Feb | 19                                                             | 18.5 - 18.6  | Fluids - II                        |                              |                                                 |
| 8    | M         | 20-Feb | Holiday                                                        |              |                                    | Pressure                     | Lab B3: Wave optics - emperical modeling        |
|      | W         | 22-Feb | 20                                                             | 18.7, 19.1   | Fluids - III, Entropy - I          |                              |                                                 |
|      | Th(night) | 23-Feb | Midterm 2                                                      |              |                                    |                              |                                                 |
|      | F         | 24-Feb | 21                                                             | 19.2 - 19.4  | Entropy - II                       |                              |                                                 |
| 9    | M         | 27-Feb | 22                                                             | 19.5 - 19.6  | Entropy - III                      | 1st law of thermodynamics    | Lab B4: Presentation                            |
|      | W         | 01-Mar | 23                                                             | 19.7 - 19.8  | Entropy - IV                       |                              |                                                 |
|      | Th(night) | 02-Mar | No night class                                                 |              |                                    |                              |                                                 |
|      | F         | 03-Mar | 24                                                             | 20.1 - 20.3  | Energy Transferred Thermally - I   |                              |                                                 |
| 10   | M         | 06-Mar | 25                                                             | 20.4 - 20.6  | Energy Transferred Thermally - II  | 2nd law of thermodynamics    | No Lab                                          |
|      | W         | 08-Mar | 26                                                             | 20.7 - 20.9  | Energy Transferred Thermally - III |                              |                                                 |
|      | Th(night) | 09-Mar | Exam prep./reflec.                                             |              |                                    |                              |                                                 |
|      | F         | 10-Mar | 27                                                             | 21.1 - 21.4  | Degradation of Energy - I          |                              |                                                 |