

PHYSICS

Reference
materials

1. Physics for Scientists and Engineers (with Enhanced WebAssign) by Serway & Jewett, 9th edition or Physics for Scientists and Engineers (with Mastering Physics) by Knight, 4th edition

**Course
content**

The material to be covered is contained in the following chapters and sections of **Physics for Scientists and Engineers by Knight, 4th edition**.

| Weeks | Topics | Chapter & Section |
|-------|---|--------------------------------------|
| 1 | Concepts of motion | Ch.1: 1{8 |
| 1{2 | Kinematics in one dimension | Ch.2: 1{6 (7 optional) |
| 2{3 | Kinematics in two or three dimensions (including circular motion) | Ch.3: 1{4; Ch.4: 1, 2, 4{6 |
| 3{4 | Dynamics in one dimension | Ch.5: 1{7; Ch.6: 1{4, 6 (5 optional) |
| 4 | Newton's laws | Ch.7: 1{5 |
| 5 | Dynamics in two dimensions | Ch.8: 1{5 |
| 5 | Work and kinetic energy | Ch. 9: 1-6 |
| 6 | Energy | |