

Class Schedule and Assignments**Unit 3: Thermodynamics (with a little Oscillations)**

- October 31, Friday **Topic: Temperature, Ideal Gases, and Kinetic Theory**
Read: 15-1, “Measuring Pressure” on pp. 245-246, 16-1, 17-1
Assigned Problems: A46, A47; **CH 15:** 42; **CH 16:** 19; **CH 17:** 6, 21, 25, 39, 73
Note: Unless otherwise noted, treat all gases as ideal.

- November 3, Monday **Topic: Heat and the First Law of Thermodynamics**
Read: “Heat and Temperature” on p. 264, 16-2, 17-2 (stop at “Phase Diagrams” on p. 285), 18-1
Assigned Problems: A49, A50; **CH 16:** 21, 25, 47; **CH 17:** 27, 49, 53, 59; **CH 18:** 17

- November 5, Wednesday **Topic: PV Diagrams and Gas Processes**
Read: 18-2, 18-3
Assigned Problems: A51, A52; **CH 18:** 12, 25, 29, 31, 37, 43, 55

- November 6, Thursday **Topic: Computer Simulations**

- November 7, Friday **Topic: Problem Session**

- November 10, Monday **Topic: Heat Engines and the Second Law**
Read: Chapter 19
Assigned Problems: A55; **CH 19:** 3, 15, 17, 19, 21, 31, 44, 47

- November 12, Wednesday **Topic: Microscopic Entropy**
Read: Supplementary Reading Chapter 7
Assigned Problems: A58; **Supp CH 7:** 1, 3, 4, 5, 6, 7, 8

- November 13, Thursday **Topic: Computer Simulations**

- November 14, Friday **Topic: Problem Session**

- November 17, Monday **Topic: Oscillations**
Read: Chapter 13
Assigned Problems: A59, A60; **CH 13:** 6, 19, 21, 25, 35, 41, 47, 67

- November 19, Wednesday **Topic: Problem Session**
- November 20, Thursday **Topic: Review**
- November 21, Friday **Topic: Group Exercise**
- November 24, Monday **Test 3**

Hand-In Problems

1. Due Monday, November 3, 4:30 pm
A48; **CH 16:** 18; **CH 17:** 18, 24, 40
2. Due Monday, November 10, 4:30 pm
A53, A54; **CH 16:** 26, 54; **CH 17:** 44, 54; **CH 18:** 16, 32, 38, 46
3. Due Monday, November 17, 4:30 pm
A56, A57; **CH 19:** 14, 20, 42, 48; **Supp CH 7:** 2, 9, 10
4. Due **Thursday**, November 20, 4:30 pm
A61; **CH 13:** 22, 32, 46, 68