Physics 311: Thermal Physics
14 January 2016

READING AND LECTURE SCHEDULE:

Tues. 19 Jan.: L1 - Chapter 1, Intro., Sec. 1.1, 1.2, 1.3
Thurs. 21 Jan.: L2 - Ch. 1, Sec. 1.4, 1.5, 1.6, 1.7, 1.9 HW #1 Due
Tues. 26 Jan.: L3 - Ch. 7, Sec. 7.13, Sec. 7.9
Thurs. 28 Jan.: L4 - Ch. 7, Sec. 7.10, 7.11, 7.12 HW #2 Due
Tues. 2 Feb.: L5 - Ch. 12, Sec. 12.1, 12.2 AM Lab Report #1 due
Thurs. 4 Feb.: L6 - Ch. 12, Sec. 12.6, 12.3, 12.4 HW #3 Due
Tues. 9 Feb.: L7 - Ch. 12, Sec. 12.5 AM Lab Report #2 due
Thurs. 11 Feb.: L8 - Ch. 2, Sec. 2.1, 2.2, 2.3, 2.4 HW #4 Due
Tues. 16 Feb.: L9 - Ch. 2, Reif, Sec. 2.5, 2.6, 2.7; Van Ness, Ch. 1 AM Lab Report #3 due
Thurs. 18 Feb.: L10 - 2.8, 2.9, 2.10, 2.11, intro to Ch. 3; Van Ness, Ch. 2 HW #5 Due
Tues. 23 Feb.: Test #1 covers L1 - L7 material, HW #1-5 (partial)
Thurs. 25 Feb.: L11 - Sec. 3.1, 3.2, 3.3, 3.4, 3.5; Van Ness, Ch. 2 HW #6 Due
Tues. 1 Mar.: L12 - Sec. 3.6, 3.7, 3.8
Thurs. 3 Mar.: L13 - Sec. 3.9, 3.10, 3.11, 3.12, Ch. 4 (3rd Law and heat capacity) HW #7
Tues. 8 Mar.: L14 - Ch. 4 (calculating changes in entropy) AM Lab #4 due
Thurs. 10 Mar.: L15 - Ch. 5, Sec. 5.1, 5.2, 5.3, 5.4 Van Ness: Ch. 3, 4, 5, 6 HW #8
Tues 15 Mar.: Test #2 covers Ch. 2, 3, 4, (L8-L14), HW #5(part) - 8
Thurs. 17 Mar.: St. Pats - No Class
Tues. 22 Mar.: L16 - 5.5, 5.6, 5.7, 5.8 Van Ness: Ch. 3 – 6, should be helpful.
Thurs. 24 Mar.: L17 - Sec. 5.8, 5.9, 5.10 HW #9
28 Mar. - 1 Apr.: Spring Break - No Class
Tues. 5 Apr.: L18 - 5.10, 5.11, 5.12
Thurs. 7 Apr.: L19 - Ch. 8, Sec. 8.1, 8.2, 8.3, 8.5, 8.6 HW #10 Due
Tues. 12 Apr.: L20 Sec. 8.5, 8.6 AM Lab Rept. #5 due
Thurs. 14 Apr.: L21 Sec. 8.7, 8.8 + supplementary material about mixtures HW #11 Due
Tues. 19 Apr.: Test #3 covers Ch. 5, 8 Sec. 1-6, (L15-L20), HW #9 -11
Thurs. 21 Apr.: L22 Ch. 6, Sec. 6.1-6.6 Van Ness: Chapter 7,
Tues. 26 April: L23 - Ch. 7, Sec. 7.1 - 7.7, (Sec. 8.10) HW #12 Due
Thur. 28 Apr: L24 - Ch. 9, Sec 9.10 - 9.12 AM Lab Report #6 due
Tues. 3 May: L25 - Ch. 9, Sec. 1-8, Quantum ideal gases, bosons and fermions (condensed version) HW #13 due
Thurs. 5 May: L26-Ch. 9, Quantum corrections to ideal gas behavior, B-E condensation
Mon. 9 May: Final Exam, 3 - 5 PM
Comprehensive, but emphasis on second half of course; closed book, closed notes, but 3 h time limit. There will be a review session prior to the final. Time to be determined.