|  | CLASS | DISC. SECTION | CLASS | CLASS | ALEKS[[1]](#footnote-1) | lAB |
| --- | --- | --- | --- | --- | --- | --- |
| WEEK | MON | TUES | WED | FRI | SUN | T, W, Th, F |
| 1 | **Jan 2**  **NO CLASS** | **Jan 3**  No Discussion Section | **Jan 4**  Welcome! Syllabus, course structure  **TB**: none | **Jan 6**  **R&P**: L1.1 (Equilibrium; equilibrium constant)  **TB**: 6.1-4 | **Jan 8**  **Obj 1:** L1.1; Chem Kinetics Review | **NO LAB** |
| 2 | **Jan 9**  **R&P**: L1.2 (Kp vs. Kc; Heterogen. Equilibria)  **TB**: 6.5-6 | **Jan 10**  Discussion Section 1  **WS01**: CHEM 142 Review, L1.1-2 | **Jan 11**  **R&P**: L1.3 (Solving equilibrium problems)  **TB**: 6.7 | **Jan 13**  **R&P**: L1.4 (Le Chât-elier’s Principle)  **TB**: 6.8  Pre-Ex1 Ref opens 12a | **Jan 15**  **Obj 2:** L1.2-4; Gas Laws Review | **Lab Orientation** |
| 3 | **Jan 16 MLK Day**  **NO CLASS** | **Jan 17**  Discussion Section 2  **WS02**: L1.3-4 | **Jan 18**  **R&P**: L2.1 (Bronsted-Lowry; acid strength)  **TB**: 7.1-5  Pre-Ex1 Ref due 11p | **Jan 20 EXAM 1**  **Coverage**: CHEM 142 Review (Kinetics, Gas Laws), Unit 1 | **Jan 22**  **Obj 3:** L2.1 | **NO LAB** |
| 4 | **Jan 23**  **R&P**: L2.2 (Calculating pH of acids and bases)  **TB**: 7.6 | **Jan 24**  Discussion Section 3  **WS03**: L2.1-2  Post-Ex1 Ref opens 6p | **Jan 25**  **R&P**: L2.3 (Acid-base properties of salts)  **TB**: 7.8 | **Jan 27**  **R&P**: L2.4 (Common ion solutions; buffers)  **TB**: 8.1-2, 8.4 | **Jan 29**  **Obj 4:** L2.2-4  Post-Ex1 Ref due 11p | **Lab 1**  Kinetics II  (take-home report) |
| 5 | **Jan 30**  **R&P**: L2.3-4, Continued  **TB**: none | **Jan 31**  Discussion Section 4  **WS04**: L2.3-4 | **Feb 1**  **R&P**: L2.5 (Titrations and pH curves)  **TB**: 8.5 | **Feb 3**  **R&P**: L2.6 (Solubility equilibria)  **TB**: 8.8-9  Pre-Ex2 Ref opens 12a | **Feb 5**  **Obj 5:** MoreL2.2-4; L2.5-6 | **Lab 2**  Weak Acid Titration  (in-lab report) |
| 6 | **Feb 6**  **R&P**: L3.1 (Energy)  **TB**: 9.1 | **Feb 7**  Discussion Section 5  **WS05**: L2.5-6; L3.1 | **Feb 8**  **R&P**: L3.2 (Enthalpy; Thermo. of ideal gases)  **TB**: 9.2-3  Pre-Ex2 Ref due 11p | **Feb 10 EXAM 2**  **Coverage**: Units 1-2 | **Feb 12**  **Obj 6:** L3.1-2; Gas Laws Review | **Lab 3**  Buffers  (in-lab report) |
| 7 | **Feb 13**  **R&P**: L3.1-2, Continued  **TB**: none | **Feb 14**  Discussion Section 6  **WS06**: L3.1-2  Post-Ex2 Ref opens 6p | **Feb 15**  **R&P**: L3.3 (Hess’s Law; Enthalpy of Formation)  **TB**: 9.4-6 | **Feb 17**  **R&P**: L3.4[[2]](#footnote-2) (Statistical entropy)  **TB**: 10.1, 10.3 | **Feb 19**  **Obj 7:** MoreL3.1-2; L3.3-4  Post-Ex2 Ref due 11p | **Lab 4**  Thermo I  (take-home report) |
| 8 | **Feb 20 Pres’s Day**  **NO CLASS** | **Feb 21**  Discussion Section 7  **WS07**: L3.3-4 | **Feb 22**  **R&P**: L3.6† (S in system and surroundings)  **TB**: 10.4-5, 10.8 | **Feb 24**  **R&P**: L3.7 (Temp & spontaneity; DG)  **TB**: 10.6-7, 10.9  Pre-Ex3 Ref opens 12a | **Feb 26**  **Obj 8:** L3.6-7 | **NO LAB** |
| 9 | **Feb 27**  **R&P**: L3.8 (∆G°, ∆G, Keq)  **TB**: 10.10-11 | **Feb 28**  Discussion Section 8  **WS08**: L3.6-8 | **Mar 1**  **R&P**: L4.1 (Redox review; Galvanic cells)  **TB**: 4.10-11; 11.1  Pre-Ex3 Ref due 11p | **Mar 3 EXAM 3**  **Coverage**: Units 1-3 | **Mar 5**  **Obj 9:** L3.8; L4.1 | **Lab 5**  Thermo II  (take-home report) |
| 10 | **Mar 6**  **R&P**: L4.2 (Standard reduction potentials)  **TB**:11.2 | **Mar 7**  Discussion Section 9  **WS09**: L4.1-3[[3]](#footnote-3)  Post-Ex3 Ref opens 6p | **Mar 8**  **R&P**: L4.3 (Cell pot-ential, ∆G, w, & conc.)  **TB**: 10.12; 11.3-4 | **Mar 10**  **R&P**: Course Review  **TB**: none | **Mar 12**  **Obj 10:** L4.2-3  **Pie Mastery**  Post-Ex3 Ref due 11p | **Lab 6**  Redox and % Composition  (in-lab report) |
| 11 | **Mar 13** | **Mar 14**  **FINAL EXAM**  **Coverage**: Units 1-4  8:30-10:20 p in BAG 131 | **Mar 15** | **Mar 17** | **Mar 18** | **NO LAB** |

**LEGEND:** R&P = Review and Problem-solving session; TB = textbook reading; L = Lesson; Obj = ALEKS Objective; WS = Worksheet; Ref = Reflection

1. All ALEKS Objectives are due at 11 pm on Sundays. The Pie Mastery assignment is due at 11 pm on Sun, Mar 12. [↑](#footnote-ref-1)
2. Lesson 3.5 has been cancelled for this course in Winter 2023 [↑](#footnote-ref-2)
3. This worksheet contains content that will be discussed in the last R&P session on Mar 8. [↑](#footnote-ref-3)