WEEK	CLASS MON	DISC. SECTION TUES	CLASS WED	CLASS FRI	ALEKS* SUN	LAB 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:** More L2.2-4; 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† (Statistical entropy) **TB**: 10.1, 10.3	**Feb 19** **Obj 7:** More L3.1-2; 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† (ΔS in system and surroundings) **TB**: 10.4-5, 10.8	**Feb 24** **R&P**: L3.7 (Temp & spontaneity; ΔG) **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 (ΔG°, ΔG, K_{eq}) **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‡ Post-Ex3 Ref opens 6p	**Mar 8** **R&P**: L4.3 (Cell pot-ential, ΔG, 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

* All ALEKS Objectives are due at 11 pm on Sundays. The Pie Mastery assignment is due at 11 pm on Sun, Mar 12.

† Lesson 3.5 has been cancelled for this course in Winter 2023

‡ This worksheet contains content that will be discussed in the last R&P session on Mar 8.