

Spring Semester 2016 – Tentative CHE150B schedule

| # | DATE | Topic | Relevant Reading | Due | Quiz Schedule | CHE150L schedule |
|----|-------------|---|-------------------|-------|-------------------|-------------------------------------|
| 1 | T-Jan 12 | Welcome. Units and Significant Figures | 1.4-1.5 | | | No Lab this week |
| 2 | Th-Jan 14 | Unit Conversions. Atoms and Isotopes. | 1.6, 2.1-2.4 | | | |
| 3 | T-Jan 19 | Atomic Mass, The Mole and Molar Mass | 2.5-2.7 | As 1 | Q1 (class 1-2) | No Lab this week |
| 4 | Th-Jan 21 | Electron Configurations. | 3.9-3.10, 4.5 | | | |
| 5 | T-Jan 26 | Periodic Trends. Lewis Dot Symbols. Ions and Ionic Bonding | 4.4, 4.6, 5.2-5.3 | As 2 | Q2 (class 3-4) | Lab 1: Conversions and Units |
| 6 | Th-Jan 28 | Naming Compounds. Covalent Bonding. Energy | 5.4-5.7. 3.1 | | | |
| 7 | T-Feb 2 | Energy, Light and Quantum Theory | 3.1-3.4 | As 3 | Q3 (class 5-6) | Lab 2: Recycling Plastics |
| 8 | Th-Feb 4 | Electronegativity and Polarity. Lewis Structures | 6.1-6.3 | | | |
| 9 | T-Feb 9 | Formal Charge and Resonance. Exceptions to Octet Rule | 6.4-6.6 | As 4 | Q4 (class 7-8) | Lab 3: Metals in Water |
| 10 | Th-Feb 11 | Empirical Formulas. Molecular and Formula Masses. % Composition. Molar Mass | 5.5, 5.7-5.10 | | | |
| -- | T-Feb 16 | Exam 1 – Classes 1-8, Assign 1-4, Quiz 1-4 | | | | Lab 4: Analysis of a White Powder |
| -- | Th-Feb 18 | No Class, Dr Winget is out of town | | | | |
| 11 | T-Feb 23 | Molecular Geometry and VSEPR | 7.1-7.2 | As 5 | Q5 (class 9-10) | Lab 5: Calculations with Molar Mass |
| 12 | Th-Feb 25 | Molecular Geometry and VSEPR contd. Valence Bond Theory | 7.2, 7.4 | | | |
| 13 | T-Mar 1 | Hybridization Theory | 7.5-7.6 | As 6 | Q6 (class 11-12) | Lab 6: VSEPR Theory |
| 14 | Th-Mar 3 | MO Theory | 7.7 | | | |
| -- | T-Mar 8 | SPRING BREAK | | | | No Lab this week |
| -- | Th-Mar 10 | SPRING BREAK | | | | |
| -- | T-Mar 15 | PEAK WEEK | | | | No Lab this week |
| -- | Th-Mar 17 | PEAK WEEK | | | | |
| 15 | T-Mar 22 | Intermolecular Forces | 7.3 | As 7 | Q7 (class 13-14) | No Lab this week |
| 16 | Th-Mar 24 | Calculations with Balanced Chemical Equations | 8.1-8.3 | | | |
| -- | T-Mar 29 | Exam 2 – Classes 9-14, Assign 5-7, Quiz 5-7 | | | | Lab 7: Oil Inquiry Lab |
| 17 | Th-Mar 31 | Limiting Reactants. Aqueous Solutions. | 8.4, 9.1 | | | |
| 18 | T-April 5 | Precipitation and Redox Reactions. | 9.2 | As 8 | Q8 (class 15-17) | Lab 8: Stoichiometric Calculations |
| 19 | Th-April 7 | Acid-Base Reactions. Molarity. Titrations. | 9.3, 9.5-9.6 | | | |
| 20 | T-April 12 | pH. Dilutions | 9.5 | As 9 | Q9 (class 18-19) | Lab 9: Water Hardness |
| 21 | Th-April 14 | Energy and Energy Changes. Work and Heat | 10.1-10.2 | | | |
| -- | T-April 19 | Exam 3 – Classes 15-19, Assign 8-9, Quiz 8-9 | | | | Lab 10: Dilutions and Solutions |
| 22 | Th-April 21 | Hess's Law, Enthalpies of Formation and Bond Enthalpy | 10.3, 10.5-10.7 | | | |
| -- | T-April 26 | SPARC – NO CLASSES | | | | No Lab this week |
| 23 | Th-April 28 | Reaction Rates | 19.1-19.3 | | | |
| 24 | T-May 3 | Review and Catch Up | | As 10 | Q10 (class 20-23) | No Lab this week |