

CHEMISTRY 212 - LABORATORY SCHEDULE
Fall 2016

TEXT/MATERIALS: Laboratory worksheets and POGIL handouts are available on the Blackboard website. Lab manual: *CHEM 212*, Fountainhead Press (2016); ISBN 978-1-68036-295-4.

REQUIRED EYE PROTECTION: Students must wear the approved goggles issued by the department *at all times in the laboratory—NO EXCEPTIONS.*

| Week of: | EXPERIMENT |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------|
| 1. Aug. 22 nd | CHECK-IN / SAFETY ORIENTATION : Safety in the Laboratory; Glassware & Equipment/Data Representation and Recording |
| 2. Aug. 29 th | Separation and Recovery of Components in a Ternary Mixture |
| 3. Sept. 5 th | LABOR DAY (Holiday – no lab meetings for the week.) |
| 4. Sept. 12 th | The Bohr Model and Spectroscopy of the Hydrogen Atom |
| 5. Sept. 19 th | Periodic Properties of Some Elements |
| 6. Sept. 28 th | Lewis Structures and Molecular Shape |
| 7. Oct. 3 rd | Determining the Empirical Formula of Magnesium Oxide |
| 8. Oct. 10 th | LAB MIDTERM EXAM |
| 9. Oct. 17 th | Stoichiometry - A Mole Ratio Study |
| 10. Oct. 24 th | Classifying Chemical Reactions |
| 11. Oct. 31 st | Redox Chemistry - Activity of Metals |
| 12. Nov. 7 th | Calorimetry and Hess's Law |
| 13. Nov. 14 th | Determination of the Universal Gas Constant, R / CHECK OUT |
| 14. Nov. 21 st | THANKSGIVING BREAK |
| 15. Nov. 28 th | LAB FINAL EXAM |

***FAILURE TO CHECK OUT MAY RESULT IN A FAILING GRADE FOR THE ENTIRE SEMESTER.**

Grading: The overall lab grade is a weighted average, and is calculated using the formula below:

$$(\text{Lab average} \times 0.70) + (\text{Midterm Exam} \times 0.15) + (\text{Final Exam} \times 0.15) = \text{lab grade}$$

Letter grades are assigned based on the overall lab grade compared to the following cutoffs:

90% = A; 80% = B; 70% = C; 60% = D; <60% = F