By: Sasan Karimi, Tirandai Hemraj-Benny, Mihaela D. Bojin
bluedoor, LLC ISBN: 978-1-59984-517-3

- Safety and behavior in the lab will count towards the students' overall lab grade.
- What can cause a student to get an F or WU for laboratory:
  Missing the number of laboratory classes (3), Lateness which equates to absences in terms of grade, Disobedience in terms of safety in the laboratory, No work performed in the class, Not enough laboratory reports submitted
- NO LATE lab reports will be accepted. You cannot submit a lab report if you do not conduct the experiment.

METHODS BY WHICH STUDENTS LEARNING WILL BE EVALUATED:
The overall grade will be computed using the following general distribution:
- Examinations, Assignments and Classroom Performance 50%
- Laboratory Work and Reports 25%
- Final Examination 25%

LABORATORY SCHEDULE
28th Aug. Check in and safety film
4th Sept. Light and Color (#1)
11th Sept. Visible Absorption Spectroscopy (#2A)
18th Sept. Visible Absorption Spectroscopy (#2B)
25th Sept. No Class
2nd Oct. Chromatography (#3)
9th Oct. Dyeing with Indigo (#4)
16th Oct. Syntheses of Pigments: Chrome Yellow and Prussian Blue (#5A)
23rd Oct. Manufacture of Gouache Paint (#5B)
30th Oct. The Chemistry of Metal Reactivity and Acid Etching (#6)
6th Nov. Alloys: The Copper, Silver and Gold Penny Experiment (#7)
13th Nov. Preparation of a Small Fresco (#8)
20th Nov. Chemistry of Photography (#9)
27th Nov. No Class
4th Dec. Alternative Photography (#10A)
11th Dec. Alternative Photography (#10B)
18th Dec. Check Out
Laboratory Work: (3 points)
Punctual Attendance and Performance of laboratory, while adhering to all safety rules, is required. Departmental Policy: if a student is late and misses the introduction, he/she cannot perform the experiment and cannot receive credit for that particular laboratory.

Communication of results is an integral part of every branch of science, as well as an incredibly useful skill. Scientific knowledge could not progress if scientists did not present their findings in a clear and concise manner. A lab report must be written after every experiment. You will usually have the same data as your partner, but your lab report is an independent assignment.

Pre-Laboratory Report: (3 points)
A pre-lab report consists of sections 1-4 and is due on the day of the experiment. This report should be typed, Times New Roman, 12 font and double spaced.

1. Your name and name of lab partner
2. Title of experiment and date performed
3. Objective
   In 1-2 sentences, explain your primary goals and how you will achieve them. Use general terms, referring to techniques or methods, rather than describing specific procedures.
4. Introduction/Theory
   Briefly describe the scientific principle behind the experiment. It may be based on the material in the lab manual, your text book, or other sources (include citations). Include relevant chemical reactions - this is a chemistry class! This section should be at least 12 lines.

Completed Lab Report: (4 points)
Your report will be due at the beginning of the next lecture session after the experiment has been completed. No Late assignments will be accepted.

5. List of materials and equipment
6. Summary of procedure and observations
   Describe the experimental procedure in your own terms. Do not simply re-copy the steps from the manual. Be sure to describe only what you actually did, including any changes made to the procedure. If choices were possible, only indicate which one you made and explain why. Use the past tense and avoid the first person voice (I, we, us). Also include your observations such as color changes, release of vapor, etc. Diagrams may be helpful.
7. Data and calculations
   The lab manual usually provides sheets for data and results, which you may tear out and include in your lab report. However, calculations should be clearly labeled and neatly worked out so they can be checked and given appropriate partial credit.
8. Conclusions and Sources of Error
   Describe if and how the experimental objectives were met, and what scientific principles were investigated. Explain how your measurements are related to each other and your objective, and how they led to your results. You should always summarize your final results. When identifying an unknown, describe how you made this decision. You must also describe what could have led to incorrect or inaccurate results in this experiment, as well as steps that could be taken to prevent or correct the problems. This is different than a mistake or failure to follow instructions. Consider flaws in the experimental setup or assumptions that have been made.
9. Questions
   Most experiments have a set of questions to answer or problems to solve. You must complete this section and turn it in as part of your final lab report.