Analytical Instrumental Laboratory

CHEM 314; Spring 2018

Course Name: CHEM 314, 3 credits

Prerequisites: CHEM 212

Location: Reichardt 165 (lecture); Reichardt 245 (lab)

Meeting Time: M 9:15-10:15am (lecture), MW 2:15-5:15pm (lab) **Final:** Friday, May 4 1-3 pm (based on lab meeting time)

Instructor: Dr. Jingqiu Mao Office: Reichardt 188 Phone: 907-474-7118

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Office Hours: T&TH 2-4PM (other times by appointment).

Recommended Materials:

Skoog, Holler and Crouch,





work, a list of all reagents and materials needed, a description of what you expect to find and/or how you will analyze the data, and include references to any outside sources consulted.

1. Title-



- 3. **Introduction-** (2-3 paragraphs) Give some background on your question. Feel free to recycle from the project definition, but make it concise and coherent.
- 4. Instrument Diagram- (1-



Additional Guidelines for Written Assignments

- Abbreviations are often necessary and should be introduced clearly when used the first time.
- Element names (Iron) are spelled out only if they are the first word in a sentence and when they are part of a name (iron oxides). Otherwise, the symbol is used (Fe).
- Succinct description and clear reference in text to all figures and tables in the text.
- Do not duplicate data between the text and figures or tables
- Use SI units or the standard units in the field for all laboratory data. Appropriate formatting is used to indicate units. For example, mg kg⁻¹ is correct, while mg/kg or ppm is not. Pay attention to these details in the literature you are reviewing.
- Use bold font to indicate references to figures, tables, and equations in the text. This helps during the proofreading process. Reference to



REVIEW SAFETY FEATURES IN THE LAB (REIC 245)

- Cubbies for bags and coats
- Location of personal protective equipment (PPE)
- Safety shower/eyewashes
- Fume hoods
- Exits out of room and out of building
- Waste bottles and broken glass container(s)
- Chemical/safety literature
 - o hazard.com/msds is a good start

LABORATORY SAFETY RULES

- USE COMMON SENSE AT ALL TIMES!!!
- No horseplay in lab
- No unauthorized experimentation
- Wear safety glasses/goggles—know when each is required
- Use of correct gloves (when appropriate)
- Knowledge of location and use of MSDS's
- NO food, drink, or gum in lab
- Do not leave fires unattended
- Label all containers with contents, your name, your class, and date/semester
- Report any accident or spill or unsafe condition

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