

# CHEMISTRY 254 Inorganic Laboratory

Spring 2019

<b>G. W. Rice</b>	Discussion and Monday 3-6 (ISC 1050, ext. 12049, gwrice@wm.edu)
<b>D.C. Bebout</b>	Tuesday 11-2 (ISC 2039, ext. 12558, dcbebo@wm.edu)
<b>R. E. O'Brien</b>	Tuesday 2-5 (ISC 1058, ext. 11858, reobrien@wm.edu)
<b>J. C. Molloy</b>	<b>Course Instructor</b> (ISC 2031, ext. 12546, jcmolloy@wm.edu)

1. Lab discussion attendance policy: **MANDATORY**.  
**Each** unexcused absence will result in a **25-point reduction** in your **lab report grade** for that experiment.
2. You **must** have a copy of Lab Manual 254 for Spring 2019.
3. Calculators are mandatory for calculations in every lab exercise.
4. Each student must provide personal eye protection. **Splash goggles are required to perform the lab** and may be purchased at the College Bookstore.
5. Reports must be written in ink on the report sheets torn from the lab manual. **Do not erase or white-out data**. If a digit is to be changed, draw a single line through the incorrect digit and write the correct digit **above**, not over, the crossed-out digit. "Erasable ink" is graded as **pencil**.
6. Reports must be completed in the laboratory and handed in prior to leaving the laboratory.

## Laboratory Schedule for Spring 2019

Dates	Expt. #	Experiment
Jan 28, 29	<b>1</b>	Determination of Chloride and Vitamin C
Feb 4, 5	<b>2</b>	Some Analyses of Water
Feb 11, 12	<b>3</b>	pH and Potentiometric Titrations
Feb 18, 19	<b>5</b>	Determination of a Cation Mixture using Cation Exchange
Feb 25, 26	<b>7</b>	Inorganic Synthesis of Alum and CuCl
Mar 4, 5		<b>Spring Break!</b>
Mar 11, 12	<b>6</b>	Electrochemistry
Mar 18, 19	<b>8</b>	Synthesis of a Coordination Compound (Week 1) <b>and Midterm Exam</b>
Mar 25, 26	<b>8</b> <b>9</b>	Synthesis of a Coordination Compound (Week 2) Complexes of Copper, Part A
Apr 1, 2	<b>9</b>	Complexes of Copper, Part B
Apr 8, 9	<b>10</b>	Determination of the Mole Ratio in a Complex
Apr 15, 16	<b>11</b>	Analysis of a Coordination Compound
Apr 23, 24		<b>Final Exam</b> , taken in the <b>lab section</b> in which you are registered

The midterm exam will be based on the techniques, chemistry and calculations covered in Experiments 1 through 5 & 7. The final exam will be cumulative but heavily weighted toward Experiments 6 & 8 through 11. Each exam will count 15% of the final grade, with the remaining 70% from the graded laboratory exercises.

**A:** 100-95, **A-:** 94-90, **B+:** 89-87, **B:** 86-83, **B-:** 82-80, **C+:** 79-77,  
**C:** 76-73, **C-:** 72-70, **D+:** 69-67, **D:** 66-63, **D-:** 62-60, **F** < 60

<b>Sections</b>	1, 2, 3, 10	Monday 3–6 pm	Students are expected to attend all labs in the section for which they are registered— <b>no section hopping</b> . If it is necessary to switch sections for an experiment, you must obtain permission <b>in advance</b> .
	4, 5, 6, 11	Tuesday 11–2 am	
	7, 8, 9, 12	Tuesday 2– 5 pm	