

# Chemistry 101L/103L Syllabus, Summer 2016

**Discussion Instructor:** J.C. Molloy    **Info:** ISC Rm 2031, ext. 12546; [jcmolloy@wm.edu](mailto:jcmolloy@wm.edu)

**Laboratory Instructors:** Molloy

**Lab T.A.:**

**Laboratory Coordinators:** Ms. Shieh (ext. 12678); ISC Rm 1037

**Chem 101L/101** are cognate lab/lecture courses.

**Chem 103L/103** are cognate lab/lecture courses.

**Objectives:** Laboratory techniques in chemistry; applications of chemical fundamentals

**Safety:** Everyone is responsible for safe practices in the laboratory. Details are in this laboratory manual. Students must wear approved goggles in the laboratory.

**Grading:**      Experiments: 55%      Quizzes: 20%      Final: 25%

**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

## Course Structure

A pre-lab demonstration and discussion in ISC Auditorium, Room 1127 precedes the laboratory experiment itself. You must attend both the pre-lab and the lab.

Experiment date	Exp. #	Experiment
May 31		<b>No Lab</b>
June 1	1	Measurements & Calculations; also Appendix A
June 2	2	Estimation of Avogadro's Number
June 6	<b>Quiz</b>	3 Absorption Spectrophotometry
June 7	4	Data Analysis and Graphing
June 8	5	Mass Relationships in Chemical Reactions
June 9		<b>Review -- 103 Class</b>
June 13	<b>Quiz</b>	6 Neutralization Titrations
June 14	7	Redox Titrations—Determination of Hydrogen Peroxide
June 15	8	Enthalpy Measurements and Hess' Law
June 16	<b>Quiz</b>	9 Some Properties of Gases
June 20	10	The Molar Volume of Hydrogen
June 21	11	Chemical Kinetics: The Reaction of Iodide with Peroxydisulfate
June 22	<b>Quiz</b>	12 Photometric Determination of an Equilibrium Constant
		<b>Review -- 103 Class</b>
June 27		<b>Final Review -- 103L Lab</b>
June 28		Final Exam