

CHEM 1515L - General Chemistry 1 Laboratory

Fall 2026 Syllabus, Section 03, CRN 40706,

Credit hours: 1

Instructor

Janelle Mitchell

Email: jpmitchell@ysu.edu

Public Instructor Information

Instructor Title: Senior Lecturer

Instructor Professional Qualifications:

M.S., Chemistry, Youngstown State University

B.S., Chemistry, Youngstown State University

Instructor Office Location: WBH Room 5019

Instructor Office Phone: 330-941-7102

Course Description

1515L. General Chemistry 1 Laboratory. Quantitative experiments focusing on topics covered in CHEM 1515 lectures. Three hours lab. Prereq.: "C" or better in CHEM 1501 or equivalent and MATH 1513 or MATH 1510 or MATH 1510C. Coreq.: CHEM 1515. 1 s.h.

Course Readings

Group	Title	Author	ISBN
Required	A Laboratory Manual for General Chemistry 1515L, 2026.	B.D. Leskiw	9781645654919

Each student must bring a lab manual to every lab session.

The course readings are subject to change in the event of extenuating circumstances, research developments, current events, and/or to ensure better learning.

Schedule of Lab Experiments

Day	Date	Proposed Topic	Due/To Prepare for Class
Mon	8/24	No Lab	
Mon	8/31	Experiment 1: Introduction and Safety; Significant Figures and Scientific Notation	
Mon	9/7	No Lab Legal Holiday; YSU Closed	
Mon	9/14	Experiment 2: Density Determination of Liquids and Solids	
Mon	9/21	Experiment 3: Chemical Nomenclature	
Mon	9/28	Experiment 4: Determining the Percentage of KClO ₃ in a Mixture	
Mon	10/5	Experiment 5: Limiting Reagents	
Mon	10/12	Experiment 6: Volumetric Titration	
Mon	10/19	Experiment 7: Antacid Analysis	
Mon	10/26	Experiment 8: Determining the Molar Mass of a Volatile Liquid	
Mon	11/2	Experiment 9: Determining the Molar Volume of a Gas	

Mon	11/9	Experiment 10: The Specific Heat Determination of Unknown Metals
Mon	11/16	Experiment 11: Heat of Netralization
Mon	11/23	Make-up
Mon	11/30	Experiment 12: Lewis Dot Stricture and Molecular Geometry
Mon	12/7	No lab; Finals Week

The course schedule, policies, procedures, and assignments in this course are subject to change in the event of extenuating circumstances, by mutual agreement, and/or to ensure better learning.