

CHEM 1515L - General Chemistry 1 Laboratory

Summer 2026 Syllabus, Section 02, CRN 30055,

Credit hours: 1

Instructor

Janelle Mitchell

Professional Qualifications:

M.S., Chemistry, Youngstown State University

B.S., Chemistry, Youngstown State University

Senior Lecturer

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Communication Expectations:

Emails will be answered within 2 business days. Please be sure to include your class (day and time) in your email.

How to Refer to me:

Professor Mitchell

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; "C" or better in MATH 1513 or "C" or better in MATH 1510. 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	6/29		No Lab
Wed	7/1		No Lab
Fri	7/3		No Lab
Mon	7/6	Significant figures and scientific notation	Experiment 1: Introduction and Safety; Significant Figures and Scientific Notation
Wed	7/8	Density	Experiment 2: Density Determination of Liquids and Solids
Fri	7/10		No Lab
Mon	7/13	Chemical Nomenclature	Experiment 3: Chemical Nomenclature
Wed	7/15	Mass Percent	Experiment 4: Determining the Percentage of Potassium Chlorate in a Mixture

Fri	7/17		No Lab
Mon	7/20	Limiting Reagents	Experiment 5: Limiting Reagents
Wed	7/22	Stoichiometry: Neutralization	Experiment 6: Volumetric Titration
Fri	7/24		No Lab
Mon	7/27	Stoichiometry: Neutralization	Experiment 7: Antacid Analysis
Wed	7/29	Molar Mass of a Gas	Experiment 8: Determining the Molar Mass of a Volatile Liquid
Fri	7/31		No Lab
Mon	8/3	Molar Volume of a Gas	Experiment 9: Determining the Molar Volume of a Gas
Wed	8/5	Specific Heat/Calorimetry	Experiment 10: The Specific Heat Determination of Unknown Metals
Fri	8/7		No Lab
Mon	8/10	Specific Heat/Calorimetry	Experiment 11: Heat of Neutralization
Wed	8/12	Molecular Geometry	Experiment 12: Lewis Dot Structures and Molecular Geometry
Fri	8/14		No Lab

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.