

# CHEM 1515L - General Chemistry 1 Laboratory

Fall 2026 Syllabus, Section 10, CRN 40711,

Credit hours: 1

## Instructor

Janelle Mitchell

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## 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 |
|-----|-------|------------------------------------------------------------------------------------|--------------------------|
| Wed | 8/26  | No Lab                                                                             |                          |
| Wed | 9/2   | Experiment 1: Introduction and Safety; Significant Figures and Scientific Notation |                          |
| Wed | 9/9   | Experiment 2: Density Determination of Liquids and Solids                          |                          |
| Wed | 9/16  | Experiment 3: Chemical Nomenclature                                                |                          |
| Wed | 9/23  | Experiment 4: Determining the Percentage of KClO <sub>3</sub> in a Mixture         |                          |
| Wed | 9/30  | Experiment 5: Limiting Reagents                                                    |                          |
| Wed | 10/7  | Experiment 6: Volumetric Titration                                                 |                          |
| Wed | 10/14 | Experiment 7: Antacid Analysis                                                     |                          |
| Wed | 10/21 | Experiment 8: Determining the Molar Mass of a Volatile Liquid                      |                          |
| Wed | 10/28 | Experiment 9: Determining the Molar Volume of a Gas                                |                          |

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|-----|-------|------------------------------------------------------------------|
| Wed | 11/4  | Experiment 10: The Specific Heat Determination of Unknown Metals |
| Wed | 11/11 | No Lab; Legal Holiday                                            |
| Wed | 11/18 | Experiment 11: Heat of Netralization                             |
| Wed | 11/25 | No Lab: Legal Holiday                                            |
| Wed | 12/2  | Experiment 12: Lewis Dot Structure and Molecular Geometry        |
| Wed | 12/9  | 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.