

CHEM 1516L - General Chemistry 2 Laboratory

Fall 2026 Syllabus, Section 01, CRN 40740,

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

1516L. General Chemistry 2 Laboratory. Quantitative experiments focusing on topics covered in CHEM 1516 lectures. Three hours lab. Prereq.: "C" or better in CHEM 1515L; "C" or better in CHEM 1515. Coreq.: CHEM 1516. 1 s.h.

Course Readings

Group	Title	Author	ISBN
Required	A Laboratory Manual for General Chemistry 1516L	B.D. Leskiw	9781645654926

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 Topics and Assignments

Day	Date	Proposed Topic	Due/To Prepare for Class
Tue	8/25	No Lab	
Tue	9/1	Experiment 1: Enthalpy of Fusion	
Tue	9/8	Experiment 2: Solubility of KNO ₃ in Water	
Tue	9/15	Experiment 3: Colligative Properties; A Molecular Weight Determination	
Tue	9/22	Experiment 4: The Determination of an Equilibrium Constant Using Beer's Law	
Tue	9/29	Experiment 5: The Determination of K _a for a Weak Acid	
Tue	10/6	Experiment 6: Potentiometric Determination of the Dissociation Constant	
Tue	10/13	Experiment 7: Group 1 Cation Separation and Analysis	
Tue	10/20	Experiment 8: Group 2 Cation Separation and Analysis	
Tue	10/27	Experiment 9: Group 3 Cation Separation and Analysis	
Tue	11/3	Experiment 10: Group 1-3 Cation Separation	

Tue	11/10	Experiment 10: Group 1-3 Cation Separation
Tue	11/17	Make-up
Tue	11/24	Legal Holiday: No Class
Tue	12/1	Experiment 10: Group 1-3 Cation Separation
Tue	12/8	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.