

CHEM 1516L - General Chemistry 2 Laboratory

Fall 2026 Syllabus, Section 05, CRN 40744,

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
Thu	8/27	No Lab	
Thu	9/3	Experiment 1: Enthalpy of Fusion	
Thu	9/10	Experiment 2: Solubility of KNO ₃ in Water	
Thu	9/17	Experiment 3: Colligative Properties; A Molecular Weight Determination	
Thu	9/24	Experiment 4: The Determination of an Equilibrium Constant Using Beer's Law	
Thu	10/1	Experiment 5: The Determination of K _a for a Weak Acid	
Thu	10/8	Experiment 6: Potentiometric Determination of the Dissociation Constant	
Thu	10/15	Experiment 7: Group 1 Cation Separation and Analysis	
Thu	10/22	Experiment 8: Group 2 Cation Separation and Analysis	
Thu	10/29	Experiment 9: Group 3 Cation Separation and Analysis	
Thu	11/5	Experiment 10: Group 1-3 Cation Separation	

Thu	11/12	Experiment 10: Group 1-3 Cation Separation
Thu	11/19	Make-up
Thu	11/26	Legal Holiday: No Class
Thu	12/3	Experiment 10: Group 1-3 Cation Separation
Thu	12/10	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.