

CHEM 3719L - Organic Chemistry 1 Laboratory

Summer 2026 Syllabus, Section 02, CRN 31099,

Credit hours: 1

Instructor

Dr. Nina Stourman

Professional Qualifications:

Ph. D., Bioorganic Chemistry and Chemistry of Natural Physiologically Active Compounds, Moscow State University, Russia, 1992

BS/MS Chemistry, Moscow State University, Russia, 1984

Professor

Email: nvstourman@ysu.edu

Office: WBH 6027

Office Phone: 330-941-7112

Preferred Contact Method: nvstourman@ysu.edu

Communication Expectations:

expect to receive a reply to your email question(s) within 24 hours, Monday through Friday, or within 48 hours during weekend.

How to Refer to me:

Dr. Stourman or Professor Stourman

Course Description

3719L. Organic Chemistry 1 Laboratory. Typical techniques, preparations, and procedures of analysis of organic compounds. Three hours lab. Prereq.: "C" or better in CHEM 1516 and "C" or better in CHEM 1516L. Coreq.: CHEM 3719. 1 s.h.

Course Readings

Group	Title	Author	ISBN
Optional			

There is no textbook.

Links to important resources will be available on BlackBoard.

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	Reading(s)	Proposed Topic	Due/To Prepare for Class
Mon	5/11		Introduction, Safety, Orientation	Online Safety Quiz (10 pts)
Wed	5/13	Prelab Reading on Molecular Modeling	Finding Chemical Data and Molecular Modeling	Lab report due before 10 pm
Fri	5/15	No Class		
Mon	5/18	Prelab Reading Experiment on Measurements	Safe transfer of organic liquids and solids, the use of balances, glassware, pipettes, vacuum filtration	Lab report due before 10 pm
Wed	5/20	Prelab Reading Experiment on Solubility & Miscibility	Water bath for heating/evaporation of liquids, gravity filtration for removing impurities from organic solutions	Lab report due before 10 pm

Fri	5/22	No Class		
Mon	5/25	No Class		
Wed	5/27	Prelab reading Experiment on Recrystallization	Choosing an appropriate solvent for recrystallizing, purifying solids from hot solvent; filtration & melting point	Lab report due before 10 pm
Fri	5/29	Prelab Reading Experiment on Stereochemistry	Drawing and comparison of stereoisomers in ChemDraw/3D; conformational analysis of isomeric molecules using Chem3D	Lab report due before 10 pm
Mon	6/1	Prelab Reading Experiment on Extraction & TLC	Use of separatory funnel, washing and drying of organic solutions, evaporation, Thin Layer Chromatography	Lab report due before 10 pm
Wed	6/3	Prelab Reading Experiment on Distillation	Separation and purification of organic liquids by their boiling point; identification of unknowns in a mixture	Lab report due before 10 pm
Fri	6/5	No Class		
Mon	6/8	Prelab Reading Experiment on Substitution 1	Preparation of an organic halide from an alcohol through a substitution pathway; reaction is run twice to improve yield	Lab report (notebook pages) due before 10 pm
Wed	6/10	Prelab Reading Experiment on Substitution 2	Use of distillation to purify liquid substitution product from the previous session; repeated on both samples to improve yield	Lab report (notebook pages) due before 10 pm Full report is due 6/12
Fri	6/12	No Class		
Mon	6/15	Prelab Reading Experiment on Elimination 1	Conversion of an alcohol into alkene through acid-catalyzed elimination; application of Le Chatelier's principle in synthesis	Lab report (notebook pages) due before 10 pm
Wed	6/17	Prelab Reading Experiment on Elimination 1	The use of distillation to purify the liquid substitution product from previous week; tests on product sample to prove an alkene formed	Lab report (notebook pages) due before 10 pm Full report is due 6/19
Fri	6/19	No Class		
Mon	6/22	Prelab Reading Experiment on Addition	Preparation of a solid halogenated organic product through electrophilic addition of bromine to an electron-deficient alkene	Lab report due before 10 pm
Wed	6/24		Short online test on lab basics covered during the semester	Lab Final
Fri	6/26	No Class		

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.