Queens College of the City University of New York  
Department of Chemistry and Biochemistry  
Basic Organic Chemistry  

Chem 102.1  Laboratory Schedule - Remsen 351  Spring 2016


Week 1 Check-in. Review of safety rules and instruction for waste disposal.

Week 2 Isolation of pure acetylsalicylic acid from aspirin tablets  
(Download procedure from Blackboard)

Week 3 Molecular Models, Exp 21 p 239-252
Week 4 Identification of Hydrocarbons Exp 24, p. 289-299
Week 5 Chromatography, Exp 23, p. 275-287
Week 6 Identification of Alcohols and Phenols, Exp 25, p. 301-312
Week 7 Identification of Aldehydes and Ketones, Exp. 26, p. 313-327
Week 8 Carboxylic Acids and Esters, Exp. 27. p. 329-340
Week 9 Amines and Amides, Exp. 28, p. 341-352
Week 10 Preparation of Aspirin, Exp 30, p365-376
Week 11 Isolation of Caffeine from Tea Leaves, Exp 31, p. 377-387
Week 12 Carbohydrates, Exp. 32, p 389-399
Week 13 Preparation of Hand Cream, Exp 35, p. 423-431

Week 14 Check Out (No lab work can be done)

Each student must work independently - do your own experiments!

Grading: Lab report and results: 75%; Lab technique: 10%; 3 unannounced quizzes: 15%

SAFETY GLASSES MUST BE WORN AT ALL TIMES!!

Bring the following: Bound (not spiral) lab notebook, matches, a rag, and cleaning supplies.

Your laboratory instructor will tell you how to keep your notebook; answer all questions at the end of each chapter. Write reports in ink.

If you drop the course, you must check out of the laboratory.

Food, drinks, and chewing gum are not permitted in the laboratory.  
Use the lockers in the hall for coats etc.

College schedule - mark your calendars!!  
On Tuesday Feb. 9 classes follow a Friday schedule
Course Objectives: Students will learn basic organic laboratory techniques including isolation and purification of organic compounds, and identification of organic compounds using chromatography and chemical tests; problem solving via understanding the use of the analytical tests is emphasized. Structural organic chemistry, which is a major focus of the lecture part of the course, will be covered in a molecular models session. Students will learn to carry out basic preparations of compounds and mixtures. At the conclusion, students will have a foundation that will allow them to carry out basic organic laboratory procedures, they will know how to keep an organic laboratory notebook, and they will know basic safety procedures including handling of hazardous waste.

Assessment: Lab instructors will assess students by means of three short unannounced written quizzes on the procedures to be carried out, by grading of lab notebooks, by collecting laboratory products and assessing them for yield and purity and accuracy of reported results in the student notebook, and by observation of the students during lab, including student technique and adherence to safety rules.

Course Requirements:
Pre or corequisite: Chem 102.3 (C or better if prerequisite)

Prerequisites for Chem 102.1: C or better in Chem 101.3 and 101.1, or C or better in Chem 113.4 and 113.1

Note: a C- in any prerequisite will not permit you to take 102.3/102.1!

You must earn a C or better in Chem 102.3 and 102.1 to take Chem 103.3 and 103.1