This course will be partly on-line and partly in-person. On-line classes will be given live and will be recorded and be available for you to view later. CUNY policy is as follows:

Students who participate in this class with their camera on or use a profile image are agreeing to have their video or image recorded solely for the purpose of creating a record for students enrolled in the class to refer to, including those enrolled students who are unable to attend live. If you are unwilling to consent to have your video or image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live.

On-line classes during weeks 1, 2, 13, and 14 will be held during your regular lab time. During weeks 3 – 12, labs will run at half-capacity to ensure social distancing. Your lab instructor will place you in one of Group A or B. You will only be permitted in lab when it is your group’s week. Your lab instructor will arrange a time with both groups outside of lab hours to conduct the on-line labs during those 10 weeks.

NOTE: For those who cannot participate in-person labs for health concerns, please contact your lab instructor immediately, and let him/her know you will only participate in the online lab sessions. Make sure you get a detailed online lab session schedule from your lab instructor.

Course Requirements:
Prerequisites for Chem 252.1: C or better in Chem 251.4 and 251.1


For the Macroscale and Microscale text book, all experiments to be done are the Macroscale version.
In lab experiments:
Group A will do the in-person labs in Weeks 3, 5, 7, 9, 11
Group B will do the in-person labs in Weeks 4, 6, 8, 10, 12

It is important that you check the Chemistry 252 “Laboratory Notes” for details of all experiments, because there are sometimes significant changes from the procedures described in the laboratory manual.

Exp 1 Review of safety in the Organic Lab, Instructions on disposal of chemical waste, Lab protocols, Maintenance of a laboratory note-book.
(Both A & B online, week 1)

Exp 2 I. Reduction of a ketone with sodium borohydride
(Both A & B online, week 2)

Exp 3 Check-in. II. Preparation of the alkyne, diphenylacetylene, from stilbene.
(A3 & B4 in-person) Note: A3 = Group A in week 3; B4 = Group B in week 4; and so on.

Exp 4 III. Diels-Alder reaction
(B3 & A4 online)

Exp 5 IV. Fischer Esterification: Preparation of methyl benzoate
(A5 & B6 in-person)

Exp 6 V. Aldol condensation. Preparation of dibenzalacetone.
(A6 & B5 online)

Exp 7 VI. Aromatic Electrophilic Substitution.
Preparation of 1,4-tert-butyl-2,5-dimethoxybenzene
Finish any uncompleted experiments from earlier weeks.
(A7 & B8 in-person)

Exp 8 VII. Preparation of aniline
Start Organic Qualitative Analysis (see lab notes)
(A8 & B7 online)

Exp 9 VIII. Nitration of methyl benzoate.
(A9 & B10 in-person)

Exp 10 IX. Aromatic nucleophilic substitution reaction
(A10 & B9 online)

(A11 & B12 in-person)
Exp 12
XI. Preparation of acetanilide
Continue Organic Qualitative Analysis.
(A12 & B11 online)

Exp 13
Finish any uncompleted preps AND continue with
Organic Qualitative Analysis
(Both A & B online, week 13)

Exp 14.
Finish any uncompleted preps AND continue with
Organic Qualitative Analysis
(Both A & B online, week 14)

It is important that you check the Chemistry 252 “Laboratory Notes”
for details of all experiments, because there are sometimes significant
changes from the procedures described in the laboratory manual.

If you miss a lab due to illness or other excused reason, you must
make up the lab within ONE week since reagents and compatible
waste containers will not be available after that. The make-up forms
are available at the stockroom, and must be signed by the instructor
in whose lab you carry out the work, and by your instructor for
permission.

Safety glasses and lab coats are required in the laboratory at
all times – even if you already wear glasses.

Do not bring food, chewing gum, coats or backpacks into the
lab – use the hall lockers.

All experiments are to be done individually
– no team experiments.

Course Objectives: Students will continue to learn basic organic lab safety, waste
disposal, and techniques, will continue to learn how to keep an organic laboratory
notebook, and through the identification of unknowns experiment, start to learn to solve
lab problems on their own. At the conclusion of this semester students will be prepared
to do organic research if they so choose.

**Assessment:** You will need to keep a neat, legible laboratory notebook; a lined 100 page, 9 ¾ x 7 ½ inch composition book is best. Your lab instructor will periodically check your notebook, so it must be up-to-date, and will announce when it will be collected for grading.

75% - lab book (Report: 40%, results, 35%)

15% - unannounced lab quizzes (these will test lab material, not lecture material)

10% - your lab technique (including neatness, skill, attention to detail and safety)