Instructor
Professor Mathew Maye
Office Hours: Friday 1-3pm & by appointment
Office: CST 4-014D Phone: (315) 443-2146 E-mail: mmmaye@syr.edu

Teaching Assistants
Office hours are held in CST 1-004.
Laxmikant Pathade Section: 002,003 Office hours: Thursday 10-12 PM E-mail: lpathade@syr.edu
Alisha Lewis Section: 003,004 Office hours: Monday 02-04 PM E-mail: ajlewis@syr.edu

Undergraduate Laboratory Supervisor
Gary Bonomo Office hours: By appointment. Office LSC 012A E-mail: gbonomo@syr.edu

Laboratory Sections
Section M002: Tuesday 3:30-6:15 pm
Section M003: Wednesday 12:45 - 3:30 pm
Section M004: Wednesday 3:45 - 6:30 pm

Laboratory
Room LSC 101 (Life Sciences Complex)

Chemistry Department
Office: CST Room 1-014
Web: chem.syr.edu
Facebook: www.facebook.com/ChemistryAtSU

Course Description & Goals
This laboratory course is designed to introduce general chemistry experiments to Honors students, and students who expect to major in chemistry. This laboratory supplements the lecture course, Honors General Chemistry (CHE 109), but is an independent course. The course is designed to introduce a breadth of chemistry experiments, introduce you to scientific writing at the college level, and to provide you with hands on experience with scientific instrumentation. Your success in this course will greatly depend on your pre-lab preparation. A key component of this course is not simply your carrying out the lab, but to inspire you to craft your note taking, experimental technique, and scientific writing style.

Lecture
There is no separate lecture, and this course is not integrated with CHE 109 (Honors General Chemistry). A brief lecture will introduce each laboratory experiment.

Materials/Textbook
Laboratory Manuals (Signature Labs Series, Chemistry Lab Manual: CHE 129; Cengage) are available at the SU bookstore. The laboratory module booklet must be purchased and brought to the first class. Additional experiments and pre-labs will be provided as handouts. A laboratory notebook and safety glasses will be provided.

General
The first lab will be meeting on September 1 or 2, 2015 (depending on your session) either at 3:30-6:15 pm (T), 12:45-3:30 pm (W), or 3:45-6:30 pm (W) in LSC (Life Sciences Complex) 101.
(5) Conclusions (1 paragraph): Briefly summarize the experiment and your results. Was it a successful lab, if not, what were the problems or the potential sources of error? If you were to do it again (or improve the lab) what would you do?

(6) References (3 references minimum): If you used any Internet, book, or literature sources, make sure to cite them appropriately in the text and list them here. Follow ACS style for citing references.

(7) Include the carbon copy of your notebook so that your TAs can compare your reports to actual values.

■ Late to Lab, Late Pre-Labs, and Late Lab Reports

Please do not be late to lab, the first 20 minutes will be introduction to the lab and techniques. You will not be able to begin a lab until your pre-lab has been completed and deemed satisfactory by the TA. Late lab reports (reports handed in after the start of the next week’s lab) will automatically lose 25%, and lose an additional 10% each day.

■ Laboratory Technique and Preparation

In order to complete the labs on time and successfully, you need to show the proper technique and have prepared. Technique is a learned skill, so observe your TA and ask questions, while preparation requires a bit of time before lab. Writing down a brief preparation statement in your notebook before attending the lab is required and will get you ready for the lab.

■ Cheating and Plagiarism

Simply put, any instance of cheating and plagiarism will be reported to the College of Arts & Sciences, and a disciplinary meeting will be scheduled. In the lab, there are two sources of plagiarism; calculations/values, and the lab report. Do not copy your partners’ work, you must do your own calculations and form your own observations. The Syracuse University Academic Integrity Policy can be found at http://academicintegrity.syr.edu.

■ Missing a Lab:

Please don’t miss a lab. There are no makeup labs. If you have a documented excuse your final grade will be prorated. If you know in advance you will miss a lab, please contact Prof. Maye. Absences due to family emergencies, sickness, etc. need to be documented with proper documentation (verified by Chemistry staff). It is not sufficient to just visit the health center.

■ Switching Sections:

Once you have been assigned to a section, you are NOT allowed to switch sections during the semester, unless approved ahead of time by Prof. Maye (see above).

■ Punctuality:

Please arrive on time.

■ Disability-Related Accommodations

Students who are in need of disability-related academic accommodations must register with the Office of Disability Services (ODS, http://disabilityservices.syr.edu.), 804 University Avenue, Room 309, 315-443-4498. Students with authorized disability-related accommodations should provide a current Accommodation Authorization Letter from ODS to the instructor and review those accommodations with the instructor.

■ Religious Holidays

No student will be refused in the class because he or she is unable to participate in a class requirement due to his or her religious holiday requirements. However, you must make arrangements with Prof. Maye and your Teaching Assistant before such absences. SU’s religious observances policy can be found at http://supolicies.syr.edu/emp_ben/religious_observance.htm.

■ Safety in the Chemical Laboratory

Safety glasses must be worn at all times in the lab. You are not allowed to wear shorts, dresses, open shoes, or contact lenses. We will go over safety in week one, and will introduce you to any hazards during the
Special Research Topics:
Special topic labs will be used to introduce you to modern instrumentation and research topics. The class will be broken into several groups and you will rotate between experiments. Scheduling of topic E may occur outside normal lab times in order to accommodate research/instrument schedules. A scheduling form will be sent out at suitable time. Final reports for each topic will be due on the last day of class.

Special Topic B: Compare and Contrast the Optical Properties of Fluorescent Molecules, Proteins, and Quantum Dots using UV-Visible and Fluorescence Spectroscopy.
Special Topic C: Synthesis of Semiconductive Quantum Dots via Organometallic Methods.
Special Topic D: Synthesis of CsPbX₃ perovskite nanocrystals via organometallic methods and observation of wide color gamut via halide exchange.
Special Topic E: Research Instrumentation Tours and Demos (AFM, TEM, XRD & NMR).