

UC BERKELEY

College of Chemistry



Summer Youth Intensive Program

For high school students entering 9-12 grades in Fall 2016 who are passionate about learning and doing scientific research in chemistry, biochemical engineering, material science, or related fields, and who are focused on maximizing their future success in college.

August 7-13, 2016
Stanley Hall

Summer Youth Intensive Program (SYIP) goes over the course of ONE year. It starts in August 2016 with a one-week intensive taught by faculty from the College of Chemistry. The Intensive is taught in an interactive way, utilizing small group learning activities and extemporaneous feedback strategies to promote students to think for themselves, learn to apply theory, communicate effectively, build group dynamics, and hone skills that set a UC Berkeley student apart from the others. The students can also take advantage of learning opportunities outside of the lecture hall such as group excursions to tour the Lawrence Berkeley National Laboratory and Lawrence Hall of Science, get insight about the college application process from the UC Berkeley Admissions Office, and engage in discussions with UC Berkeley undergraduates and faculty mentors.

A select group of students from the one-week intensive will be invited to participate in part II of the program, which will entail 9 months of remote coaching from an assigned mentor in a faculty research group and a 4-week onsite internship in the assigned faculty research group. Invited students will return to Berkeley in the summer of 2017 to complete the 4-week internship.



Our World Class Faculty

For One-Week Intensive

John Arnold



Peter Marsden



Michelle Douskey

One Week Intensive Course Schedule

Professors John Arnold, Michelle Douskey and Peter Marsden will teach you to think for yourself, how to process concepts and apply theory, learn to effectively communicate and substantiate your ideas to others, and build group dynamic skills while covering the following topics from the general chemistry curriculum.

The following activities, augmented with the curriculum, will help students obtain firsthand knowledge about college applications, campus life, and scientific research done at UC Berkeley.

Day 1: Representing Molecules

- Octet Rule
- Chemical Bonds
- Molecular Shape
- Tour of UC Berkeley

Day 2: Molecules in Motion

- Ideal Gases
- Phase Changes
- UC Berkeley Admissions Office Orientation and Q&A

Day 3: Chemistry in Solutions

- Equilibrium
- Acid Base Chemistry
- Lawrence Hall of Science

Day 4 & 5: Chemical Energy

- Bond Energies
- Entropy
- Free Energy
- Tour of Lawrence Berkeley National Laboratory
- Mixer with College of Chemistry students and faculty

Our World Class Faculty

For Remote Coaching & Lab Internship



Richmond Sarpong



Wenjun Zhang



Douglas S. Clark



Matthew B. Francis



Peidong Yang



Jeffrey A. Reimer

Remote Coaching and Laboratory Internship

(By Invitation Only)

October 2016 through Summer

Students who demonstrate an advanced and/or progressive ability to synthesize and communicate the information taught during the one-week intensive will be invited to participate in a 9-month remote coaching and 4-week onsite internship program. The remote coaching would begin soon after the one-week intensive in General Chemistry and the internship would occur the following summer.

For more information, visit our website at <http://chemistry.berkeley.edu/syip/curriculum> or click [here](#).





Course Details

UC Berkeley
College of Chemistry
Summer Youth Intensive Program
August 7-13, 2016

SYIP tuition is \$3,600 per person
(Activities, lodging and meals included)

Apply online [here!](#)

Registration will end on
June 30, 2016



Contact Us

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For more information, visit our website at: <http://chemistry.berkeley.edu/syip>

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