

## Nanoscience Microscopy Syllabus

**Description:** Welcome to Nanoscience Lab! This course is designed for high school students who are interested in learning the basics of nanoscience and some key applications. During this intensive five-day program, you will develop skills in hands-on nanoscience experimentation and scientific communication, while also learning how nanoscience is applied to everyday life.

**Education Manager:**  
Rita Blaik, PhD

**Program Coordinator:**  
Elaine Morita, PhD

**Instructors:**  
Adam Stieg, PhD  
Hong Zhou, PhD  
Laurent Bentolila, PhD

**Course Hours and Structure:** MTWThF 9:00 AM – 5:00 PM in the California NanoSystems Institute. A course schedule is attached. Each day will focus on a different imaging technique.

Even though course hours are only 9:00 AM – 5:00 PM, you are expected to follow attendance codes of conduct for Summer Sessions and this course for the duration of the program unless prior written permission is obtained at least three days before the beginning of the course. You should also expect to spend about 1-2 hours per night on homework.

**Safety Dress Code:** Lab safety is very important. You must wear long pants and shoes that cover the entire foot. A lab coat, safety glasses, and gloves will be provided when necessary. If you arrive in inappropriate clothing, you will be sent to purchase some at the UCLA store. **If you are not dressed appropriately, you will not be allowed to participate in the day's experiments.**

**Pre-Homework:** You are responsible for a set of reading that will be sent out before the course begins. We will reference these articles throughout the course.

**Homework:** There will be four homework assignments given during the week; each one requires you to write a blog post. These assignments are due at 9:00 AM the day after they are assigned. These will be explained in more detail during class.

**Final Presentation:** On Friday, you will present in groups on one of the experiments you learned during the week. More details will be given later in the week. We invite your families to attend, with questions! This presentation session will be held from 10:00 AM – 1:00 PM, followed by a reception.

**Grading:** Pass/no pass.

The grading structure is as follows:

- Completion of homework assignments with an average grade of satisfactory (30% of total grade)
- Participation in all workshop activities and lab activities (30%)
- Final presentation (40%)

A passing grade requires a total score of at least 70%. In addition, any student who fails to abide by the proper codes of conduct as defined in the welcome packet and our safety rules may receive a “no pass” grade. If you ever feel like you’re struggling, please feel free to come talk to any of the instructors!