

UCL SCHOLARS PROGRAM PARTICIPANT COMMENTS FALL 2022-24

Emma Isella '25 - Geobiology and Biology Double Option Caltech & Earth Sciences UCL

It's hard to believe that my time at UCL is halfway over – I've been having an incredible time immersing myself in both the academic culture of the school and all of the wonderful opportunities that come with living in London. Having grown up in the suburbs of Los Angeles, studying abroad gave me the chance to try out going to school far away from home and living in another country. UCL is different from Caltech in almost every aspect: it has forty times the number of students, it's located right in the center of London, has a much more independent learning style, and has students from all over the world interested in all kinds of subjects (not just STEM)! While I loved the past three years at Caltech, I feel that studying at UCL has provided me with a fresh perspective on how unique the Caltech environment and teaching style is in addition to allowing me to explore a new place, both academically and culturally.

Your time at UCL will begin with Freshers Week, where the Student Union and all of the different societies (the UK version of clubs) put on events to welcome you to the campus. I joined the Ice Society, which hosts both hockey skating and figure skating teams, and the Greenough Society, which is the Earth Sciences department society. Classes at UCL emphasize independent learning more than Caltech, so you're given the time to pick societies that interest you and immerse yourself in them. If you're interested in continuing a sport you couldn't keep up with at Caltech (like me) or just want to try out something new (like the iconic British sport of rowing), Wednesday afternoons are kept free of classes for "Team UCL" (any sports society) to host events. I've been really enjoying getting back into figure skating, but there is any sport you could imagine available.

Your academic life at UCL consists of four classes called modules, two of which have to be in your home department. I'm taking two Earth Science modules, one module in Biosciences, and a History of Art module. The science modules are all on topics not offered at Caltech, so it's been really exciting to explore these new fields. All of the classes I'm taking are structured around four hours of lecture per week, with the assignments mostly being independent projects that we are given a few weeks to complete rather than weekly assignments. I've found that this teaching style requires a lot more organization than the weekly problem set structure we have at Caltech, since it's left to you to decide how to break down the longer projects, but I've found it very doable. My favorite class would probably have to be my art class, which is focused on Contemporary Photography. This class involves going to a new art gallery each week, so it has been a great way to both learn more about art, a topic I've always been interested in, and to explore London – since each class is in a different gallery around the city, I always explore the area after the class session is over.

Beyond the academic aspects, a big part of studying abroad at UCL is that you'll be given housing in the heart of Bloomsbury, a borough of London that places you in great proximity to many museums and, of course, the Tube. I've also found it to be a very safe neighborhood, even when returning to my room later at night. (And it is a 5 to 10 minute walk to classes.)

If you're interested in exploring the UK and Europe, London makes for a great home base – you can easily get weekend flights or trains to mainland Europe for less than \$50 if you plan ahead. I haven't made too much use of that because I really want to get a good sense for what it means to live in London, so I've spent all of my weekends exploring the city. London is extremely walkable and there is so much to do and see – a walk in any direction takes you through beautiful streets lined by historic buildings and will land you at an incredible museum. My favorite so far is the Natural History Museum, which hosts some of Charles Darwin's original specimens, but there are so many great art and history museums (the National Gallery, the British Museum, the V&A) which are all free to visit. As a bit of a coffee enthusiast, I've also been really enjoying the many cute cafes around campus. London is a huge city with incredible history and a rich international culture, and is a great place to live in while studying abroad.

Shir Goldfinger '23 – Mechanical Engineering and Visual Culture Minor Caltech & Mechanical Engineering UCL

My first few weeks at UCL have been absolutely incredible. From the orientation and classes to just London itself, these past few weeks have been nothing like what I've experienced at Caltech. To start with the obvious, UCL is a huge university with approximately 40,000 students enrolled. Here, you'll meet people from all over the world (UCL is aptly named London's Global University). I didn't realize just how refreshing this would feel until I got here and saw it for myself.

For our first weeks on campus, we attended several orientation events and activities, including UCL's Welcome Fair. This was a massive event where UCL's societies set up booths to get to know the new students and introduce them to a plethora of campus events. During the orientation week, I also got to attend not one, but TWO incredible boat tours on the Thames. We cruised by iconic sights such as Big Ben, the Tower Bridge, and the London Eye all while getting to know other students. You'll have no problem making loads of friends, from both near and far, during orientation.

After orientation, we jumped straight into our classes (modules). I am taking two mechanical engineering modules and two humanities modules. In all of them, I've had much more free time to dive deeply into the reading and course content, as the modules don't bombard you with problem sets like they do at Caltech. You are expected to complete readings and worksheets on your own, and while these are reviewed during class time, they are never explicitly checked for completion. But, you should 100% still complete them! There will most likely be a final essay or exam at the end of term that will count for the majority (if not all) of your grade, so keeping up with the coursework is essential to doing well in these modules. On a lighter note, I will say that the humanities modules here are so unique and enjoyable. For example, I'm taking a film module that focuses on superheroes, so my weekly coursework consists of watching superhero movies. This week, I watched *The Incredibles* and *Spiderman: Into the Spiderverse*! These

humanities modules also give me the opportunity to interact with non-STEM students. For once, I am the only STEM student in some of my classes!

UCL is right in the middle of London, so in my free time, I love to go and explore the city. Our accommodations are a very short walk from several Tube stations for easy access to all parts of the city. I highly recommend visiting Covent Garden, St. Paul's Cathedral, and taking a stroll along the Thames. When people think about London, they tend to think about old palaces, museums, and cathedrals. However, I was completely amazed at all the modern architectural sites throughout London. My favorites have been "The Walkie-Talkie", "The Gherkin," and "The Cheese grater" (Londoners sure do love their nicknames).

Studying abroad in London has been a once-in-a-lifetime experience. I know that if you decide to give it a chance, you'll love living in London just as much as I do.

Annabel Gomez '23 – Mechanical Engineering Caltech & UCL

Although I've only been at UCL for about a month, I've had quite an exciting time. I have always wanted to study abroad and was excited when I learned that Caltech had a study abroad program. I'm from the suburbs of Northern California so I had never been to London, much less lived in a big city. Nevertheless, I was excited to for the new experiences and opportunities. UCL is a very large school compared to Caltech. There are about 40,000 students total, including Master's and PhD students. UCL also has a wide diversity of students from around the world studying a wide range of majors. In fact, many people are greatly surprised when they find out I am a girl studying Mechanical Engineering!

The class structure here is quite different from Caltech. At Caltech, we have a list of general requirements, or Core, and elective classes that we must take in addition to our major-related classes. At UCL, however, students only take classes related to their major. As a result, I am usually the only STEM major in my humanities classes, which is refreshing. I am taking four classes, or modules, in total (two mechanical engineering classes, an art history class, and an anthropology class: Bio Fluid Mechanics, Controls and Instrumentation, Art in London before 1600, and Introduction to Material and Visual Culture). The mechanical engineering modules are unique in the sense that they offer modules in very specific subject fields. I have been particularly enjoying my humanities modules. For example, my art history class is a museum-based class so every week, we travel to a new museum to study various art pieces. This past week we went to the Victoria and Albert Museum where we studied famous Florentine art such as Michelangelo's David and The Gates of Paradise. The structure of these modules is also different from Caltech in the sense that we do not have weekly problem sets to work on. Instead, we have about one to two lectures a week and a recitation, or tutorial, session where we discuss topics covered in lecture and work on problems. For this reason, I have more time outside of class to review the material on my own.

Living in the large city of London has been outside of my comfort zone, but it has been a fun experience! During this time there are no COVID restrictions at UCL, or London and things have pretty much gone back to normal. So far, I have had the opportunity to visit the historical sites, such as Kensington Palace, Buckingham Place (where I got to see the historical Queen's procession), the London Eye, the London Tower Bridge, Westminster Abbey, and Big Ben. I was also worried about the food scene when I first got here but I have been pleasantly surprised.

There is a plethora of cafés from french toast, hot chocolate, to Instagramable cafés. Additionally, there is very authentic Mexican restaurant near UCL and every Thursday, there is a great Farmer's Market at UCL that sells delicious pizza, pasta, and pastries. I am excited for the adventures that lie ahead!

Jenny Ji '23 – Bioengineering and Neurobiology Caltech & Biological Sciences UCL

Studying abroad has helped me gain a broader world view and a chance to experience new environments. Since I've grown up in Southern California, studying at Caltech has not pushed against my comfort zone in ways that studying at UCL has been able to do. UCL is uniquely positioned within walking or commuting distance of cultural and historical centers, and I've visited the Globe Theatre and paid multiple trips to the British Museum (less than ten minutes away by walking).

UCL is fundamentally different from Caltech. Although the campus is not much bigger, there is a significantly larger student population. There is a wide range of fields of study, with many students pursuing linguistics and social science careers. Even within the field of biology, there are additional majors such as genetics and evolutionary biology. In contrast to many students at Caltech aiming to pursue a pathway in academia or joining a commercial laboratory, many biology students here are instead looking at futures in consulting firms. Moreover, there is a large international student population. This has allowed for many conversations with people from diverse backgrounds and disciplines.

Through study abroad, I mainly hoped to complement the applied engineering aspects of my studies at Caltech with traditional biology coursework. While most Caltech biology courses focus on illuminating the details of specific molecular pathways and cellular processes, the ones at UCL discuss a variety of topics from a more holistic lens. For example, the biology of ageing course introduces ageing from a historical lens, discusses evolutionary theory, describes methods of research (we are currently discussing advantages and disadvantages of using each type of model organism), and touches on ethical concerns of this field. Similarly, in addition to working through pedigrees and discussing tools in biology, the introduction to human genetics course features a classwide debate regarding modern bioethics, which aims to help students better appreciate the importance of genetics research while developing critical thinking skills.

I have especially enjoyed my course in medical anthropology and would recommend it to students at Caltech who have completed introductory anthropology classes but cannot find advanced anthropology courses. The class is two-fold, with a weekly two-hour lecture and a one-hour tutorial (10-person recitation-style with the course instructor). By reading ethnographies about care in Thailand and Canadian policies towards Eskimo populations, I have been able to develop more insight into health care and disease treatments. The course really pushes for self-reflection as we explore weekly modules such as the meaning of care, death and dehumanization, mental health, and ageing.

Lastly, one of the most enjoyable parts of my experience thus far has been participating in different societies. Unlike clubs at Caltech, societies here are often much larger and diverse (there really is everything ranging from a Taylor Swift society to a snow sports society). Different taster sessions allow for you to explore your interests and survey different societies before committing to one. These societies have set weekly meetings, often having different

sessions for the activity itself (e.g. Chinese calligraphy) and additional social gatherings such as picnics.

Xin Hui Ooi '23 — Mechanical Engineering Caltech & UCL

Studying abroad at UCL so far has been an amazing experience. London is a bustling city that has something to offer at every corner. Surrounding UCL's main quad is the British Library, the British Museum, and King's Cross station, which gives one plenty to explore and do. The Tube, albeit a bit pricey, makes it extremely convenient to go essentially anywhere you want, and the city itself is extremely walkable.

Academically, the structure of the courses at UCL does have a noticeably lesser workload than Caltech since classes don't typically have weekly problem sets, and there is less actual lecture time per class. At first, it felt a bit odd to have so much free time, but I realised that it gave me more time to really absorb the concepts taught in lecture at my own pace rather than hyper focusing on solving specific problems.

I am taking two mechanical engineering courses – Manufacturing and Design, and Controls and Instrumentations. Manufacturing and Design is a project-based class, similar to Caltech's Intro to Mechanical Design class. The teaching style is less hands-on, however, and more focused on how to choose specific properties of an object for manufacture. It is interesting to see this side of manufacturing and design that has a greater focus on the preplanning. Controls and Instrumentations is a bit more traditional, and is distinctly split into two parts, with different lecturers teaching the two subjects. This was unfamiliar to me at first because the classes I've taken at Caltech usually only have one professor or lecturer. Since each lecturer teaches the portion that is most related to their research or field of knowledge, each part of the course is equally as strong and in-depth.

I am also taking a humanities course that explores modern and contemporary art in London, with specific focus on queer art. Each "lecture" takes place at a different museum or archive, which is amazing because a lot of the locations are smaller, lesser-known places around London that I wouldn't have thought to explore. The freeform style of this course is wonderfully alien from the way humanities courses are taught at Caltech, and I enjoy this approach to analytically viewing and appreciating art outside of the classroom. My other humanities class is an in-depth study of translation across media. It is pretty similar in structure to the humanities classes at Caltech, with pre-reading, a lecture, and a seminar. The discussions are again more freeform, with an emphasis on opinions and perspective rather than heavy analysis on the literature, allowing the conversation to be more fluid with more room for personal reflection.

Outside of academics, UCL offers a multitude of societies to join. The societies are more serious than Caltech's clubs and sometimes have hefty membership fees. To entice people into joining, there are "taster" sessions during the first two weeks of school where you can try out what a society has to offer for free. I would encourage people to go to as many tasters as possible and ultimately pick a few to commit to for the term.

So far, my study abroad experience at UCL has allowed me to meet lots of new people from different backgrounds and explore a city rich in both history and novel activities.

Felianne Teng '23 – Computer Science Caltech & UCL, Information and Data Sciences Minor Caltech

Having the opportunity to study abroad in London this term has broadened my perspective on what it is like living in a country outside of the US. Thus far, I can say that it has been a rewarding experience to learn about a new culture and be able to explore all that London and UCL have to offer.

To start, the classes at UCL distinguish themselves from those at Caltech in teaching style. I am currently taking three Computer Science courses: Image Processing, Computer Graphics, and Machine Learning for Visual Computing. Each of these courses has three hours of lecture a week and two hours of practical labs. In the first week of classes, I found that they all started with reviewing background material essential for the course. For example, the first class of Machine Learning for Visual Computing reviewed Python, a commonly used programming language for machine learning applications. Even in subsequent lectures, we generally spent more time introducing and building up to the material being taught compared to Caltech, which tends to have more fast-paced instruction. In terms of assessment, my courses do not have weekly sets, and our grades are instead based on two or three coursework assignments distributed throughout the term. In general, this gives us more time to study the topics covered in lecture.

My fourth class is Art in London before 1600, a History of Art course. This course meets for a single two hour lecture each week at a museum in London. I really enjoy this course because it gives me a chance to explore the amazing museums throughout London and provides more immersive lectures, as I can see the artwork being discussed right in front of me. This module is assessed through two essays given throughout the term. So far, we have visited the V&A Museum, which had many beautiful sculptures and paintings on display.

In terms of social life, I have had a lot of fun exploring different clubs and societies during my time here. For example, I have been to a taster session for the Taekwondo club, where they taught us various techniques and drills. It was a fun way to meet new people and exercise. I have also been to social events for the Anime Society and Computer Science Society, and I really enjoyed being able to meet people with similar interests to me. During the first few weeks, UCL also ran social events for international students and first years. For instance, I went to a boat party on the River Thames, which had a dance floor and drinks. These were also a fun way to meet others and socialize.

Finally, exploring the city of London itself has been an amazing experience. Public transportation is very good here, and you can get to almost anywhere in London using the subway or bus. I have visited several places these past few weeks, such as the Globe Theatre, Chinatown, and the Tower Bridge. London is such a large city that there are always new places to visit just by walking around. I have had a great time so far exploring, trying new restaurants, and experiencing what it is like living in a big city.

Sarah Yun, '24 – Computer Science Caltech & UCL

This term abroad in London has been one of the most memorable experiences during my time as a Caltech student. Adjusting to life in a new country has been a rewarding challenge, and it's

pushed me to try many new things while personally maturing as an adult. I've enjoyed the academic environment here, and I find London to be a delight. It's a bustling city filled with food and culture, and I'm extremely grateful to be here. To anyone who is on the fence about study abroad at UCL, you should absolutely go for it!

The academic life at UCL is much less stressful than at Caltech. Instead of weekly sets or exams, my computer science courses here are only graded on 3-4 assignments completed over the period of the term. The CS department coordinates the deadlines of these assignments to ensure that students are not overwhelmed by overlapping deadlines. During lectures, my professors are dedicated to making lectures easily comprehensible to everyone, and they highly encourage students to interrupt lectures with questions at any point of confusion. The slower pace of the classes provides me with ample time to process new information, and it gives me more space to actively enjoy the process of learning the material.

Having more mental bandwidth and time available for non-academic activities, I've been glad to try many new things. In fact, I recently joined pole fitness club, and learning to pole dance has been both an empowering and hilarious experience. I also joined Go (baduk) club with hopes of learning to play baduk so that I'll be able to play with my grandfather who is a baduk enthusiast. Along with new experiences such as these, I've been delighted to resume old hobbies that I previously could not find time for while being at Caltech. I bought a membership at a nearby yoga studio, and I've been extremely glad to regularly practice yoga again. I've also enjoyed crocheting and reading in my free time again.

My schedule at UCL also leaves me with plenty of time to enjoy London. Public transportation in London is very convenient, and I love exploring the city. So far, during my first month here, I've visited an animal farm (fluffy sheep and goats!), watched a musical, went to a comedy club, enjoyed afternoon tea, enjoyed a walking tour of London, explored many cool bookstores and cafes, and did lots of shopping. I'm excited to see a classical musical concert by myself next weekend, and I'm also looking forward to a COIN and Jack Harlow concert next month. I actually purchased tickets today for an orchestra performance as well (free for under 21!).

Also, for other CS majors considering study abroad, we all know that fall season is recruiting for those interested in going into industry. I was originally worried that being in a different time zone could interfere with interviews, but I have not had a problem with that at all. In anything, the lighter schedule this term has provided me with much more time for interview prep and Leetcoding.

2021 Comments

Eunice Yoon '22 – Mechanical Engineering Caltech & UCL

Studying abroad at UCL during the pandemic was a great opportunity to experience a different world under minimal restrictions. Since UCL essentially did a full return to campus for its students, this term has been fully in person with all facilities open. There haven't really been any social restrictions due to Covid-19 if you have been vaccinated.

One of my favorite aspects of studying abroad so far has been the people I've met in my accommodation and in classes. UCL is a very international school, so you can definitely expect to meet and become friends with students from all over the world. Additionally, you will meet people with different backgrounds, academic interests, and hobbies. I've found that some of the

more popular majors here are law, architecture, and classics; majors you would never find at Caltech.

UCL offers a much larger variety of classes to choose from, both within and outside of your major. I am taking two mechanical engineering courses at UCL, one on instrumentation and one on manufacturing. While these are both fundamentals of mechanical engineering, Caltech does not teach concentrated classes on either topic, so it is very helpful that I am able to take these here at UCL. The classes aren't structured with weekly sets, midterm and final like most Caltech classes are. Classes here will have weekly lectures and tutorial sessions where TAs and students work through problems together. However, since nothing is due, your grades will largely depend on projects and assessments due at the end of the term. Although it takes getting used to, this class structure is very flexible, allowing you to pace yourself with the material.

I'm additionally taking a History of London Art and an Economics class. The London Art class is not really a 'class' at all; Every week we meet at different art museums/galleries in London to discuss paintings in relation to one topic. This class has essentially been an addition to exploring London with visits to Tate Britain, Tate Modern, the National Gallery, and more. The Economics class I'm taking is targeted towards non-economics majors, so the class has been helpful in getting introduced to economic terminology and concepts I would otherwise be unfamiliar with.

Due to the pandemic, UCL does require students to wear masks indoors in any academic building, although the city of London does not. We additionally are given free antigen lateral flow tests to take periodically and check our own results. Although travel to other countries is sometimes limited by the specific country's entry requirements, it hasn't been impossible. Throughout various weekends and UCL's Reading Week, I had the chance to travel to Italy, Ireland, Scotland and have plans for France and Hungary. Additionally, I am going on a 6-day skiing trip in the French Alps during Winter Break, organized by a UCL society!

I would more than encourage anyone considering a term abroad to apply and find out more about their programs. Studying abroad has a lot more to offer than it looks like on the surface, and I can easily see why it becomes everyone's favorite term at Caltech.