

Applying to LDEO Summer Intern Program

(Sponsored in part by the National Science Foundation)

Look on our Web Site for information



LAMONT-DOHERTY EARTH OBSERVATORY
COLUMBIA CLIMATE SCHOOL



SUMMER RESEARCH OPPORTUNITY FOR UNDERGRADUATES

Theme: Interdisciplinary Cutting-Edge Research through the Analysis
of Global Data

May 28th to August 6th, 2025

Stipend of \$7,000

Housing, and some traveling benefits provided.

Info and how to apply: <https://lamont.columbia.edu/education-outreach/student-summer-opportunities-intern-programs>

Projects in Earth, ocean, atmospheric, and environmental sciences

Sponsored (in part) as a REU-Site by the National Science Foundation



Application Deadline: February 23rd, 2025

Contacts:

Dr. Michael Kaplan (mkaplan@ldeo.columbia.edu)

Dr. Dallas Abbott (dallashabbott@gmail.com)

Why apply for an internship?

- 1) Potential employers after graduation look for internship experience. >>50% (or higher) of employers for high level jobs require a prior internship.
- 2) Your mentor from an internship knows you much better than your professors in classes. In our program, most mentors have either one or two mentees. They can write you more effective letters when you apply for a job or graduate school.
- 3) You can develop skills that are not taught in your classes- we teach students how to manipulate and assess scientific data, how to make a scientific oral presentation, how to make a scientific poster and how to write a formal scientific paper and/or technical report.
- 4) Writing your statement of interest helps you to formulate your own goals and interests.
- 5) Our stipend is \$700 per week for 10 weeks. We will also include up to ~\$500 for food in the LDEO cafeteria. We also pay airfare to and from the program (>200 miles). If you choose to live at home, the stipend is \$1000 more. Many internships are unpaid.

What are my chances?

High. We admit a high percentage of community college or small school applicants.

- 1) Full statement of interest (2 to 3 paragraphs- a well written statement that follows the directions online).
- 2) Both letters of recommendation submitted.
- 3) Transcript and resume submitted.
- 4) GPA B+ or better OR extremely good scientific skill set and B or better GPA.
- 5) Majoring in science or engineering.

Must be still a student in the fall. Cannot be graduating this summer.

Statements of Interest and answers to other questions asked should

- 1) List at least three potential mentors by name and explain why you are interested in working with them on their research. Some mentors search for their name and consider ONLY students who put the mentor's name in their statement of interest.
- 2) Explain any academic deficiencies- (courses not offered at my institution, family crisis, etc.).
- 3) Explain the qualities of a good scientist.
- 4) Write it out on in google docs or Word and copy and paste

Where will I live?

- We have reserved single rooms at Dominican University about 10-15 minutes by car from LDEO. The LDEO program will pay for your room. Dominican has cooking facilities and we provide some pots and pans and an air fryer and microwave.
- We will arrange for free bus transport between Dominican and LDEO once per day.
- Parking is free at both Dominican University and LDEO
- Students who prefer to live at home can do so.
- Walking distance to food and shopping
- Once a week, we plan to take you grocery shopping.

Research Projects

Earth, Marine, Environmental sciences

Each research project asks a scientific question or questions.

Some projects are laboratory based- others involve data manipulation or modeling.

Overview of Research Projects- Laboratory Biology

Require previous laboratory courses in biology and strong interest in biology.

Overview of Research Projects- Earth Science- Sediments

Require strong interest in Earth Sciences (for example, geology or geosciences) and/or climate science

Many projects ask for some experience in using a microscope even in a class. Most skills will be taught but students should enjoy getting their hands dirty.

Overview of Research Projects- Oceanography/Marine Geochemistry

Quantitative skills – for example, some college level chemistry. Some laboratory experience even if in classes. Strong interest in oceanography and Earth Sciences and/or marine sediments or “geochemistry.”

Overview of Research Project— Geosciences/Geochemistry

Previous courses in chemistry and Earth Science (or geology, if available) and strong interest in Earth Science. Some experience using a microscope. If have any lab work experience with classes (for example, chemistry or biochemistry) a plus.

Overview of Research Projects- Data Manipulation

Require strong computer and quantitative skills. Some require previous physics, computer and/or mathematics classes. An interest in climate or modelling or “geophysics” is important for some research projects.

See individual project descriptions on our website.

Overview of Research Projects- Seismology

Mathematics or Physics major- mathematics through
Differential equations. Strong interest in Earth Science

Order of Tasks for Application

- 1) Read about how to get a good letter (in frequently asked questions pdf (FAQ file) we post online), then ask two of your professors to write you a letter of recommendation - these letters will be submitted online also. (We suggest you do not ask employers- such letters typically will not help your application.)
- 2) Read over detailed descriptions of research projects - select those that are most interesting to you and for which you have the minimum scientific background to do the work.
- 3) Write your statement of interest and assemble other application materials - scanned unofficial transcript, resume.
- 4) Be sure to follow the directions.

When Applying

Your statement of interest should be typed or pasted into the online application form and all questions that are required must be answered. If required questions are not answered, ETAP (the online application system) will not allow you to proceed. Anything listed optional is not needed.

Registration form in ETAP takes awhile. Do not need to answer questions labelled optional.

YOU CAN SAVE AS MANY TIMES AS YOU NEED, AS YOU WORK ON YOUR APPLICATION!

Final

If the science on our application materials sounds fascinating, please make the time to apply. The deadline for applications is Feb. 23rd. Our previous community college students and students from small schools did very well in the program in prior years. Last year, some students presented their research at national scientific meetings.

All presented a poster and wrote a 10 to 20 page paper on their summer findings with the help of their summer advisors. They all made four oral scientific presentations and became very adept at explaining the importance of their research to an interested audience. They all learned a lot.

How to find our application the easy way.

Use the link in the recruitment brochures.

<https://lamont.columbia.edu/education-outreach/student-summer-opportunities-intern-programs>

On our website is the link where you need to apply on the NSF website

<https://etap.nsf.gov/award/7344/opportunity/10242>

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