



# MATH/SCIENCE NUCLEUS

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## Application for MSN Environmental Intern Projects (2020-21)

Lam Research Foundation has funded us to continue our Environment Internships sponsored by the Math Science Nucleus. This year we will teach techniques on monitoring chemicals in the environment and how to evaluate biological systems including species identification. This year we will be increasing our involvement with the Masonic Home Compost and Reforestation Project. Dr. Joyce Blueford, Geologist will continue as mentor with key instructor Phoebe Chen and Debbie Davidson. Art Williams will work with restoration techniques and Gabe DelCastillo will be supervising Masonic Home projects.

About 10-15 students will be selected. To qualify they need to have taken one year of science in high school and need to be a sophomore or higher. Chemistry class is highly recommended. The entire internship is 45 hours. July 6-10, July 13-17, and July 20-24, 9 am – 12 noon. First 2 weeks will concentrate at Tule Ponds (Fremont) and the last week at Masonic Home (Union City)

Interns will learn about environmental issues in the local area. They will learn how to analyze water for nutrients and elements using probes and spectrophotometers. They will learn about soil, composting, and importance in restoration. They will learn different techniques of restoration especially on what tools to use. Students will learn about how microorganisms can help determine the health of environment, and many other environmental parameters include how humans have changed the environment through time. Each day will blend lecture and outdoor experience.

This internship is meant for students who are serious about science and applying their knowledge to solve a problem. In an email send the following information to Dr. Blueford ([blueford@msnucleus.org](mailto:blueford@msnucleus.org)). Deadline is April 15 and acceptance by May 1, 2020.

Name \_\_\_\_\_

School \_\_\_\_\_ Grade \_\_\_\_\_

Email \_\_\_\_\_ Phone \_\_\_\_\_

What city do you live in? \_\_\_\_\_

List your science classes and teacher: \_\_\_\_\_

1. Why should we select you to be a Scientific Intern? (5 sentences maximum)
2. What is your greatest strength? (2 sentences maximum)
3. Tell me about a time that you participated in a team, what was your role? (3 sentences maximum)