



Children's School of Science

WOODS HOLE, MASSACHUSETTS

The Children's School of Science in Woods Hole www.childrenschoolofscience.org is looking for teachers for this summer, 2024. These are salaried positions. If interested, contact Becky Lash. beckylash@mac.com

The summer is divided into two three-week sessions.

Session A: July 1 - July 19

Session B: July 22 - August 9

Classes needing teachers: (numbers in parentheses are children's age group)

METEOROLOGY (10-11), 8:30-10:15 Session A

Weather is easy to study because it's around us every day and is always changing. But what is weather, what causes it, and how can we predict it? Solar energy input, temperature differences, and pressure variations in the atmosphere drive the weather. Students will learn about the components of weather, and they will use and construct instruments that will demonstrate concepts and collect data of temperature, atmospheric pressure, wind speed and direction, humidity, precipitation, and cloud cover. Students will become adept at identifying cloud types and recording data and looking for patterns in changing weather conditions ...and maybe even predict what tomorrow's weather will be without consulting the internet!

ANIMAL ADAPTATIONS AND BEHAVIORS (11-12), 2:30-4:15 Session B

An adaptation is a physical or behavioral characteristic that has evolved to help an organism survive in its environment. Webbed feet help ducks and bullfrogs move efficiently in water. Squid and octopuses have chromatophores that allow them to change color to match their surroundings and escape predators. A squirrel's long tail helps it balance as it walks on branches and jumps from tree to tree. How does evolution happen? We will answer this question and learn about natural selection as we set up some experiments and observe animals' behaviors in local habitats.

WETLAND ECOLOGY (11-12) 8:30-10:15 Session B

Students will explore and compare local wetlands: ponds, streams, marshes, swamps, freshwater, brackish and saltwater. We'll measure physical parameters such as salinity, temperature, turbidity, and pH. We'll look at substrate and water quality. We'll be collecting organisms from these environments and setting up terraria and aquaria to help us get to know the animals and plants of various wetlands and learn about the ecological relationships between the organisms and their environments.

ROBOTICS/ROVs (13-15) 2:30-4:15 Session B

Students will focus on the technical, economic, and environmental aspects of real-world marine engineering and electronics. Through project design and data analysis, students will explore principles such as buoyancy, propulsion, and energy. There will be frequent field trips to Woods Hole labs to observe and learn about real-world ROVs (remotely operated vehicles). Students will build and test functional underwater ROVs. This class will also have a Materials Fee.

ADVANCED MARINE BIOLOGY (14-16) 12:30 - 2:15, Session A or B

Through hands-on exposure, students will delve into the biology and ecology of marine vertebrates and invertebrates, their evolution and classification, anatomy and physiology, behaviors, and habitats. This course will include snorkeling field trips to explore different marine ecosystems around Woods Hole. Students must provide their own mask, snorkel and fins. A swim test will be administered requiring students to swim 50 ft and tread water for 2 minutes. Space is limited to 14 students.

Info about the school:

www.childrenschoolofscience.org

The atmosphere of the school is informal, but serious. Direct observation of nature, a philosophy central to the founding of the Children's School of Science in 1913, is as much in evidence today as it was when Frances C. Lillie (the founding president) and Dr. Lilian V. Morgan (the founding chairperson of the Science Committee) assembled a teaching staff for the Summer School Club. Teachers, then as now, are chosen for their scientific competence and teaching skills, and they are free to organize the details of the courses according to their particular skills and the interests of the students. As a result, the instruction is on a higher level than is usually possible for children of these ages.

Our Curriculum

The school's curriculum includes some courses that remain continually popular, such as Seashore Life, Nature Photography, Entomology, and Marine Biology. From year to year, other courses are offered which take advantage of the special qualifications of the teachers, such as Oceanography, Biological Illustration, Embryology, Herpetology, Botany, and Marine Electronics, to mention only a few.

In general, the subjects of study arise from material collected on field trips to the varied habitats in the Woods Hole area. There are short, often daily, walking trips near the school, and one class period a week is usually devoted to a driving field trip. On returning from a field trip, students may set up, stock, and maintain aquaria and terraria with their collections. Films are developed in photography classes, and detailed observations of favorite invertebrates may be committed to paper.

Our Teachers

Teachers are freed of many administrative details and can devote themselves to teaching. With few exceptions, there are no pre-requisites for any courses, nor are there any exams, homework, or credits. Children come to the school because they want to learn. The combination of these advantages provides teachers with opportunities to develop topics beyond the scope generally found in traditional classrooms. Teachers can avoid teaching that which the children find elsewhere, and they can concentrate on showing students how to explore and appreciate the special Cape Cod environment.

The school looks for teaching applicants with the highest academic qualifications. A Bachelor of Science or Arts in a scientific specialty is normally required. However, the school will consider applicants with alternative qualifications. Among the benefits accruing to teachers from a summer spent in Woods Hole is the proximity of the scientific community. Teachers are encouraged to take advantage of this opportunity – to attend evening lectures and to meet with scientists working at the various scientific institutions located in Woods Hole. Synergies developed through these interactions contribute to the quality of the courses that are taught.

For more information, contact Becky Lash. beckylash@mac.com