Our summer Outdoor Science Education Program consists of a variety of weeklong classes offered June through July for students in grades 1-12, on topics ranging from photography and art, to natural history. Courses are taught by experienced outdoor educators and take place at either Valentine Camp or the Sierra Nevada Aquatic Research Lab (SNARL). Students who enroll should have a strong interest in science, love being in the outdoors, and be willing to participate in all aspects of these academic classes. Students are expected to behave in an appropriate, respectful, and safe manner. In an effort to allow as many students to enjoy all of our camps, priority will be given to students who have not previously attended specific camps.

All classes are geared to next year’s grade level. Classes may be at Valentine or SNARL and can be 3, 4, 5, or 6 hours per day.

<table>
<thead>
<tr>
<th>Class Title</th>
<th>Location</th>
<th>Grade(s)</th>
<th>Dates</th>
<th>Time</th>
<th>Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capturing Science through a Lens ($184)</td>
<td>VALENTINE (6 hours)</td>
<td>Grades 6-8</td>
<td>June 15-19</td>
<td>9:00 – 3:00 pm</td>
<td>Janis Richardson</td>
</tr>
<tr>
<td>Beautiful Bats ($105)</td>
<td>VALENTINE (3.5 hours)</td>
<td>Grades 2-3</td>
<td>June 15-19</td>
<td>12:30-4:00pm</td>
<td>Michelle Kubiak</td>
</tr>
<tr>
<td>Science through Art ($120)</td>
<td>VALENTINE (4 hours)</td>
<td>Grades 5-7</td>
<td>June 22-26</td>
<td>9:00-1:00 pm</td>
<td>Janis Richardson</td>
</tr>
<tr>
<td>Involving Dissolving ($92)</td>
<td>VALENTINE (4 hours)</td>
<td>Grades 3-4</td>
<td>June 22-26</td>
<td>9:30-1:30 pm</td>
<td>Lisa Anderson</td>
</tr>
<tr>
<td>Sifting through Science ($92)</td>
<td>VALENTINE (3 hours)</td>
<td>Grade 1</td>
<td>June 29-July 3</td>
<td>9:30-12:30 pm</td>
<td>Lisa Anderson</td>
</tr>
</tbody>
</table>

Students will use digital photography to capture the essence of the flora and fauna of Valentine Reserve. Technology, art and science will be combined in the photography class. All students will need to bring a digital camera. Computer experience preferred.

Bats are familiar to nearly everyone, yet most people have never seen one up close. Are bats dangerous? Do bats get tangled in your hair? Folktale and fantasy are all part of people’s ideas about bats. In this class you will learn the truth about bats is more astonishing than any of the stories about them.

This course will explore science through the eyes of the artist. Looking at broad landscapes and delicate wildflowers, students will use a variety of media to enhance their observational skills while pursuing their artistic talent.

Come see what happens when we mix powders with liquids, play with evaporation, and create crystallized masterpieces. Will everything we mix dissolve? Will all our liquids evaporate? We'll use resources at Valentine, read stories, and create chemical reactions involving dissolving during this week of scientific exploration. Please note, only non-toxic materials will be used. No repeats allowed.

Young children are natural scientists. This week our little scientist will use their senses as they eagerly explore and investigate the environment at Valentine through experiments, stories, games, and nature walks. We will use magnets, sand, water, dirt, rocks, and sift our way through science!
### Bones, Beads, and Baskets ($150)
**LOCATION:** VALENTINE (5 hours)  
**Grade 5 (DUAL LANGUAGE CLASS)**  
9:00-2:00 pm  
**June 29-July 3**  
**Nick Stavros**

*Must be proficient in Spanish/English at a 4th/5th grade level. Admission to class dependent on instructor approval.*

What would it be like to live off the land in a time before VONS? This class will become a small tribe and learn how early people in America hunted and gathered food and medicine, celebrated important events and played games. Students will use and make artifacts modeling Native American ways.

### Hurray for Habitats ($92)
**LOCATION:** VALENTINE (3 hours)  
**Grades 1-2**  
9:00-12:00 pm  
**July 6-10**  
**Judy Burgenbauch**

Owls, mule deer, rabbits, coyotes and bugs all make their homes at Valentine. We will observe animals or evidence of animals that live in the high desert and/or riparian zones of the Eastern Sierra. As young scientists, we will record our findings and observations on our Habitat Boards. If you like to hike, explore, play games, and do outdoor science activities, then come join our expedition.

### Rocks & Dirt! ($92)
**LOCATION:** VALENTINE (3 hours)  
**Grade 1 (DUAL LANGUAGE CLASS)**  
9:30-12:30 pm  
**July 6-10**  
**Heather Hund**

*Must be proficient in Spanish/English at a 4th/5th grade level. Admission to class dependent on instructor approval.*

Rocks and dirt are all around us, but how much do you know about them? What is dirt made of? Do rocks sink or float? How do we use rocks in everyday life? This week we will have fun creating a science journal to record everything that we learn about rocks, dirt, and fossils. Come be a rock hound with us!

### Painting Nature ($92)
**LOCATION:** VALENTINE (4 hours)  
**Grades 5-6**  
9:00 – 1:00pm  
**July 13-17**  
**Annie Barrett**

Learn basic acrylic painting surrounded by the beauty of Valentine Reserve. Through a series of fun and easy projects and exercises the students will work up to creating a beautiful painting. We will also have lots of time to explore Valentine.

### Budding Botanists ($92)
**LOCATION:** VALENTINE (3 hours)  
**Grades 3-4**  
9:30-12:30 pm  
**July 20-24**  
**Susan DesBailletts**

The best way to appreciate Valentine Reserve is out along the trails! Our class will spend part of everyday exploring the plant and animal life of Valentine while observing nature up close. These observations will provide inspiration for sketching, scientific illustration, and learning plant identification. We’ll delve into science, as we sketch, learning about plant and animal adaptations, photosynthesis and more.

### Wild Island Adventure ($92)
**LOCATION:** SNARL (3 hours)  
**Grades 4-5**  
9:00-12:00 pm  
**July 20-24**  
**Carole Lester**

Get ready for a week on the Wild Islands at SNARL. From the water we drink to the oceans that circle the Earth, liquids are everywhere. We will explore the properties of water and the wetlands surrounding the islands by observing the creatures that live there and discovering how liquids do what they do. Come prepared to get wild and wet as you learn all about our most precious resources.

### Involving Dissolving ($92)
**LOCATION:** VALENTINE (3 hours)  
**Grades 3-4**  
9:00-12:00 pm  
**July 27-Aug 1**  
**Carole Lester**

Come see what happens when we mix powders with liquids, play with evaporation, and create crystallized masterpieces. Will everything we mix dissolve? Will all our liquids evaporate? We’ll use resources at Valentine, read stories, and create chemical reactions involving dissolving during this week of scientific exploration. Please note, only non-toxic materials will be used.
Register and Pay Online:  
https://vesr.nrs.ucsb.edu/education-outreach/outdoor-science-program-k-12/osep-classes

Register and Pay By Mail: Send the following 3 items to Carole Lester at the address below

1. a completed application form, and
2. signed University Waiver of Liability form, and
3. a check made out to "Regents of the University of California"

Carole Lester, OSEP Coordinator  
1016 Mt Morrison Rd.  
Mammoth Lakes, CA 93546

Please note:

- Applications are accepted on a first-come, first-served basis. You may drop the application in the mail or bring it to the OSEP mailbox at the Headquarters building at SNARL.
- Only complete application packets can be processed. While we will not reserve class space by telephone, you are welcome to call to check on class availability.
- Enrollment is limited and courses fill very quickly.
- No refunds after May 15.
- In an effort to allow as many students to enjoy all of our camps, this year we will not allow campers to automatically repeat a camp they have already participated in previous years. We will put a student who wishes to repeat a class at the bottom of the class waitlist.

For more information contact Carole Lester at carole.lester@ucsb.edu; Phone 805-893-5655

Outdoor Science Education Program Application

**Please fill out a separate application, waiver, and check for each class for each child.**

First Choice
Class title __________________________ Class dates __________________________

Second Choice
Class title __________________________ Class dates __________________________

Name of student: __________________________ Gender: __________________________

Student's Age (now): __________________________ Grade Level Next Year: __________________________

Name of parent(s): __________________________

Mailing Address: __________________________

Email(s): __________________________ Phone(s): __________________________

Please list emergency names and phone numbers not listed above. Let us know if someone other than a parent has permission to pick up your child.

________________________________________________________________________

________________________________________________________________________

Please list any medical or behavioral information, learning disabilities or special needs of your child. This information will be kept confidential. Use the back if more space is needed.

________________________________________________________________________

________________________________________________________________________
Behavior Agreement
An enrichment class of this type requires motivated, well-behaved students in order to ensure a quality experience for all. If your child fits this description, please read and sign the following: My child and I agree to comply with all of the rules of the class. We agree to respect the rights of others, follow directions of the University staff, participate in all activities and behave in a manner that ensures our safety and the safety of others. We understand that students who do not comply will be asked to leave the class and may not return. No refunds will be given.

Student signature  Parent signature

Scholarship Information
We don’t want a family’s financial difficulties to prevent any child from participating in our Outdoor Science Education summer programs. We offer full and partial scholarships for those in need. If your family is facing financial difficulties, we invite you to complete our confidential scholarship application. Scholarship awards are limited, based upon need, available funds and number of qualifying applicants. Applications are reviewed on a case by case basis. Please contact Carole Lester - carole.lester@ucsb.edu, 760-914-3722 for an application and if you have any questions.
Waiver of Liability, Assumption of Risk, and Indemnity Agreement

Waiver: In consideration of being permitted to visit or participate in any way in any activity, including transportation, at the above locations, I, for myself, my heirs, personal representatives or assigns, do hereby release, waive, discharge, and covenant not to sue The Regents of the University of California, its officers, employees and agents, and the City of Los Angeles Department of Water and Power, its officers, commissioners, employees and agents (all of which are collectively referred to herein as the “Releasees”) from liability from any and all claims, including the negligence of the Releasees, resulting in personal injury, accidents or illnesses (including death), and property loss arising from, but not limited to, visitation or participation in any way in any activity, including transportation, at the above locations.

Assumption of Risks: Visitation or participation carries with it certain inherent risks that cannot be eliminated regardless of the care taken to avoid injuries. The specific risks vary from one activity to another, but the risks range from 1) minor injuries such as scratches, bruises, and sprains to 2) major injuries such as eye injury or loss of sight, joint or back injuries, heart attacks, and concussions to 3) catastrophic injuries including paralysis and death.

I have read the previous paragraphs and I know, understand, and appreciate these and other risks that are inherent in visitation or participation. I hereby assert that my visitation or participation is voluntary and that I knowingly assume all such risks.

Indemnification and Hold Harmless: I also agree to INDEMNIFY AND HOLD the Releasees HARMLESS from any and all claims, actions, suits, procedures, costs, expenses, damages and liabilities, including attorney’s fees, brought as a result of my involvement in visitation or participation and to reimburse them for any such expenses incurred.

Severability: The undersigned further expressly agrees that the foregoing waiver and assumption of risks agreement is intended to be as broad and inclusive as is permitted by the law of the State of California and that if any portion thereof is held invalid, it is agreed that the balance shall, notwithstanding, continue in full legal force and effect.

Acknowledgment of Understanding: I have read this waiver of liability, assumption of risk, and indemnity agreement, fully understand its terms, and understand that I am giving up substantial rights, including my right to sue. I acknowledge that I am signing the agreement freely and voluntarily, and intend by my signature to be a complete and unconditional release of all liability to the greatest extent allowed by law.

________________________________________________________________________
Signature of Minor’s Parent/Guardian                      Date                      Signature of Participant(18+only)         Date

Participant’s Age (If Minor) ____________________________                     Participant’s Name (Print)