

Crestone Solar School
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Solar Heating and Natural Building Workshops

Free Solar Workshop

September 11-13, 2015

in Crestone

This Special Event is free for Saguache County residents.
Funded by a Saguache County Sales Tax grant.
Others may attend for sliding scale fee.
\$20 materials fee applies to all.

How To Register

[Download & Print the Special Event Registration Form Here](#)

We will create a Solar Village environment for our learning experience. Class size is limited and early registration is encouraged to reserve your place.

The regular Summer 2015 Crestone Solar School workshop schedule is posted below (Note: It does not apply to the Free September 11-13 Special Event.)

May 22 - 25 workshop: \$750 - Early registration (*received before April 23rd*)
\$800 – Late registration (*received after April 22nd*)

June 26 - 29 workshop: \$750 - Early registration (*received before May 27th*)
\$800 – Late registration (*received after May 26th*)

July 24 - 27 workshop: \$750 - Early registration (*received before June 25th*)
\$800 – Late registration (*received after June 24th*)

August 21 -24 workshop: \$750 - Early registration (*received before July 22nd*)
\$800 – Late registration (*received after July 21st*)

Orientation

This page includes many orientation instructions and suggestions. Please read it through carefully and entirely. It contains Curriculum Information, Enrollment & Cancellation Policies, Advanced Preparation Suggestions, What To Bring list, and Arrival & Departure Suggestions.

Enrollment & Cancellation Policy

Workshops are open to all on a first-come basis. Class size is limited and early registration is encouraged to reserve your place.

The full workshop fee is due one month in advance. If you cancel up to 30 days prior to the workshop, 50% of your tuition is non-refundable. If you cancel within 30 days of the start of the workshop, your full workshop fee is non-refundable. A written cancellation request is required.

We reserve the right to cancel any workshop due to insufficient enrollment or for any other reason. If that occurs, you will receive a full refund of your paid workshop fee.

Note: Please make Airline Reservations *after* your scheduled workshop is confirmed.

Advanced Preparation Suggestions

Please review your high school math about fractions, and become familiar with how they operate. We will work a lot with the principle of fractions as we learn and practice the units of energy. Using these basic building blocks is where some participants have gotten slowed down a bit in previous workshops.
Be prepared!

It will be helpful if you read through all or at least some of Paul's articles about solar applications found at. You will find them under "Paul's Solar Articles" under

the Resources tab at the top of the website.

<http://new.crestonesolarschool.com/resources/solar-library/>

Curriculum

Crestone Solar School workshops are presented in two parts, balanced between essential design knowledge and learning-by-doing. These are enhanced by visual aids and tours.

Workshop fee includes course materials including a textbook with blank pages for your notes. The workshop curriculum will go in-depth as much as four days allows.

Essential Design Knowledge

- Heat Transfer, Building Load Estimation Methods, Thermal Storage, Sun Angles, Solar Radiation Availability, Climate.
- Energy Conservation techniques
- Passive and active solar heating for residences
- Solar domestic hot water
- Solar radiant floor Design
- Solar greenhouse
- Straw bale construction details
- Earth construction techniques
- Introduction to Photovoltaics (PV)
- Solar Economics including Tax Credits & Rebates
- Adobe floor construction techniques
- Earthen plasters and “alis” coatings
- Rammed Earth for walls

Hands-on Projects will touch upon these subject:

- Learning how to build a flat plate solar collector
- Learning how to build a thermos-siphon solar water heater
- Solar temperature measurement
- Solar performance evaluation
- Solar system components (piping, pumps, controls)
- Adobe clay ingredients, recipes and mixtures
- Adobe floor model construction
- Straw bale construction methods
- Earthen plasters for straw bale walls
- Alternative Energy house tours
- Design review for selected participants plans

What To Bring

Since onsite outdoor camping accommodations (bathroom and shower available) and all meals are provided, this list of suggestions addresses those situations.

- Waterproof tent, ground cloth and sleeping bag
- Sleeping pad and pillow
- Personal water bottle
- Cushion to sit on
- Flashlight (no candles)
- Umbrella and rain jacket
- Insect repellent/bug spray
- Sunscreen for high altitude
- Toilet articles and towel
- Calculator
- Notebook, pens and sticky notes
- Work clothes and sun hat
- Sunglasses for 8000 ft altitude
- Hiking boots or equivalent
- Cool evenings jacket
- Whistle
- Bowl, plate, cup and eating utensils and cloth napkins
- Please do not bring dogs or other pets, alcohol, drugs or firearms

To register, please print out the Registration Form, fill in the info and send it in with your payment via postal mail. <http://new.crestonesolarschool.com/wp-content/uploads/2015/08/FSW-registration-form3.pdf>