

2018 Agriskills

Sunday Morning: June 24th / 8:00 am – 12:00 noon

□ **COOL S**T 101: METAL PROJECT CONSTRUCTION – INTERMEDIATE & ADVANCED (PART 1 OF 3) – BRAE Lab 6**

- Recommend attending all three sessions!
- Class size may be limited so sign up early.

This team is offering a three-session workshop (Sunday morning & afternoon, and Thursday afternoon,) designed for Ag Mechanics teachers of all skill levels and seeks to add to the growing arsenal of projects we can select from to teach the skills and concepts our students need to master. This year, we are focusing on intermediate and advanced Metal Fabrication construction. Our goal is to give the participants hands-on experience in project planning and construction on projects such as: BBQ's, Shop Tables, Fire Pits, Patio Tables, woodworking projects and more. Participants can choose which project(s) to be involved with (we recommend choosing one that you would like to implement in your class next year).

Discussion topics include: teaching methods, project organization/planning, project funding, design changes based on tooling and/or materials, construction and finishing techniques and tricks/tips.

- Cost is \$25 and covers all three sessions.

Presenters: Rich Darrach, Jake Dunn, Morgan Rourke, Ryan Patterson, Sam Meredith, Garrett Rowley, Darrell Hirschler, Brian Combs & Dick Piersma

□ **HERITAGE POULTRY SAES – Poultry Unit**

Presenters: Darin Bennett, Cal Poly Animal Science Department

□ **UAV APPLICATIONS IN AG AND HANDS-ON DRONE-TO-DECISION WORKFLOWS – BRAE Lab 3 & 4**

This workshop will cover the following topics:

- Introduction to UAV (unmanned aerial vehicles or drones) applications in agriculture.
- How to legally deploy drones to collect data and/or conduct other activities.
- Hands-on activities using Pix4D software (basics of visible and near-infrared (VNIR) remote sensing, normalized differential vegetation index (NDVI), thermal imaging, etc.)

Presenter: Dr. Bo Liu, Cal Poly BioResource & Agricultural Engineering Department

□ **WILD FIRE PREVENTION: MANAGING VEGETATION USING LIVESTOCK - Room 10-200**

Goats and Forage Management. This topic will start the morning with an introduction to the industry which is known as "Targeted Grazing," using livestock to manage vegetation for a desired result. Principles that are important to understand will be outlined including: diet preference of grazing livestock and why goats are such an ideal specie and the role genetics and selection criteria play in creating livestock best suited for this line of work. We will also cover plant species that are often targeted, how palatability of those species plays into the equation and basic grazing principles. We will also go into the management that is involved with this operation such as how stock density

and animal impact are used to create desired results. The second half of this session we will go out into the field to see the Cal Poly goats working on a firebreak behind the dorms on campus. This will offer an opportunity to learn about electric fencing and all necessary accessories as well as look at fencing layout and discuss how to appropriately determine size of area and duration of grazing.

Presenter: Beth Reynolds, Cal Poly Animal Science Department

□ **COVER YOUR A**! SAFETY AND LIABILITY IN THE PROGRAM – BRAE Lab 1**

A fresh look at Facility Safety processes to ensure you have reduced liabilities across your department. In addition, we'll look at how emergency ready you are across your shops, labs, greenhouses, animal units, etc. We'll talk through strategies to empower your students under your tutelage to improve your facilities to reduce the amount of work added to your plate. Remember... proper preparation prevents poor performance!! Reduce the chances something happens, but IF it does, be emergency ready.

Presenter: Dr. Ben Swan, Cal Poly Agricultural Education & Communication Department

□ **NGSS PYROS UNITE – FIERY PHENOMENA FOR AG CHEMISTRY – Room 10-225**

Kick off Ag Chemistry with a fiery phenomenon to engage students in building their scientific design skills and exposure to thermochemistry.

Cost is \$30 and is limited to 25 participants.

Presenter: Nicole Ray

□ **FORESTRY CDE – Room 11-112**

This hands on workshop will give you the skills and knowledge you need to start an FFA Forestry team. You will also have stuff to take back to your classroom if you are just wanting to teach a section of Forestry in your classroom. Topics include Timber measurements, scaling, Tree ID, maps, compass, land measurements and more. You'll be up, outside and moving around using forestry tools on trees, measuring land mass, taking bearings and identifying trees on Campus. Everything you need to know about the Forestry CDE!

Presenter: Matt Pritchard

Sunday Afternoon: June 24th / 1:00 pm – 5:00pm

□ **COOL S**T 101: METAL PROJECT CONSTRUCTION – INTERMEDIATE & ADVANCED (PART 2 OF 3) – BRAE Lab 6**

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□ **MILK THAT GOAT! DAIRY GOAT SAES – Room 10-200**

Dairy Goat SAE opportunity: learn about dairy goats, the goat dairy industry and make your very own goat milk soap.

- Cost is \$20 and is limited to 24 participants.

Presenters: Mark & Natalie Borba

□ **FRUIT TREE GRAFTING - Crops Unit (17-101/102)**

Learn to graft an apple tree! Participants will graft their own apple tree and take it home to be planted. Principles and theory of grafting will be discussed. Reasons for grafting will be emphasized. Participants will sharpen grafting knives and practice the basic cleft graft and the bark graft. Techniques for collecting, storing and sharing scion wood will be included. Resources for purchasing fruit tree rootstock and grafting supplies shall be provided. Cost is \$5 per person and covers all grafting materials.

- Cost is \$25 and is limited to 24 participants.

Presenter: Dr. Joe Sabol

□ **SAVE OR SMASH: ADVENTURES IN ENTOMOLOGY – Room 11-118**

Presenter: Dr. David Headrick, Cal Poly Horticulture & Crop Science

□ **NOW THAT WE ARE ALL ON THE AET, WHAT DO I DO NEXT? – Room 11-118**

How many of you get overwhelmed with the new recordbook system? The AET.com has so many options to utilize as a teacher but is often not utilized or known. This workshop will be a hands-on workshop on how to implement AET into your classroom including student friendly instructions, how to utilize the POA aspect of the program and how to run reports that will make your life easier! All of this will help the busy life of an Ag Teacher!

Presenter: Lauren Peterson

□ **OUTDOOR EXPERIENTIAL EDUCATION – TEAMBUILDING ACTIVITIES – O’Neill Green**

Learn several teambuilding and leadership activities by actively participating. Activities will involve active movement, problem solving, communication, and trust. A debrief will occur after participation which will provide insights into how you can bring these teambuilding activities into your classroom. Be prepared to have fun, get to know others, and learn!

Presenter: Marni Goldenberg, Cal Poly Experience Industry Management Department

□ **FLORAL – Bldg 48 Lab A**

Learn tips and techniques to getting the most out of your flowers and tropical on the cheap. How do you hydrate hydrangeas? How do you do leaf manipulation? How do you weave leaves? How do you color flowers without spray paint? Come on to class and learn this plus much more!! We will be making at least one tropical arrangement to take home, plus working with lots of fun items. My goal is to have a project you can afford to do with your classes that

is unique and will turn some heads.

- Cost is \$30 and is limited to 25 participants.

Presenter: Danelle Ariaz

Thursday Afternoon: June 28th / 1:00 pm – 5:00 pm

- **COOL S**T 101: METAL PROJECT CONSTRUCTION – INTERMEDIATE & ADVANCED (PART 3 OF 3) – BRAE Lab 6**
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- **HANDS-ON RESOURCES FOR AGRICULTURE AND SOILCHEMISTRY TEACHERS - Room 11-112**

Presenters: George Sellu and Jerry Delsol

- **FARM MANAGEMENT: HEALTHY SOILS AND HEALTHY PLANTS - Cuesta College – Paso Robles Campus**

Discussion topics include: soil science, raising vegetables, and perennial crops.

Presenter: Dean Harrell

- **VETERINARY SCIENCE SKILLS – San Luis Obispo HS Lab**

Want simple ideas to add activities, leadership, creativity and skills to your veterinary science curriculum? This workshop will include simple steps to make your vet or animal science classes filled with fun, engagement, and the technical lessons needed for success. Numerous projects and electronic curriculum from the @slohsvetmed account will be explained / highlighted in detail. We will learn technical skills such as suturing, bandaging, surgical prep, proper restraints, and more from Dr. Marissa Greenberg, DVM. Hear tips on how to establish partnerships from local veterinary clinics and what materials / supplies to purchase for your courses. It will also include information on how to incorporate the animal statue painting project into your programs with several applications to CTE skills based curriculum. This workshop will include information and ideas for all levels of educators and will be a great place to share ideas as well.

Presenters: Anna Bates & Marissa Greenberg, DVM

- **CRUCIAL CONVERSATIONS: THE ART AND SCIENCE OF HANDLING
DIFFICULT SITUATIONS - Room 10-220**

*Presenter: Dr. Robert Flores, Cal Poly Agricultural Education & Communication
Department*

- **AGRICULTURAL COMMUNICATIONS APPLICATIONS FOR YOUR PROGRAM –
Room 10-100**

*Presenter: Mrs. Megan Silcott, Cal Poly Agricultural Education & Communication
Department*