#### 2017 CalTeach Summer Institute Workshops

June Workshops	Name of Workshop	Grade Levels	Dates
	Teaching NGSS with Lego Robotics	Grades 2-4	Monday, June 12th (One Day Workshop)
	Introduction to Computer Programming	Grades K-12	Monday, June 12th Tuesday, June 13th <b>(Two-Day Workshop)</b>
	Delving into Data in an NGSS World	Grades K-12	Wednesday, June 15th Thursday, June 16th <b>(Two-Day Workshop)</b>
	Fairy Shrimps, Tiger Salamanders, & More: Life Cycles in Vernal Pools	Grades 5-12	Thursday, June 22nd ( <b>One Day Workshop)</b>
	Engineering Challenge Part I: Ocean Pollutants	Grades 7-12	Friday, June 23rd <b>(One-Day Workshop)</b>
	Water Works Part I: Explore the Water Beneath Your Feet	Grades K-6	Monday, June 26th <b>(One Day Workshop)</b>
	Focus on Physical Science: Force, Motion, Energy & More!	Grades 4-8	Tuesday, June 27th Wednesday, June 28th <b>(Two-Day Workshop)</b>

July Workshops	Name of Workshop	Grade Levels	Dates
	Transforming Instruction & HW	Grades K-12	Tuesday, July 11th (One-Day Workshop)
	Water Works Part II: Investigate the Watershed from Summit to Sea	Grades 4-12	Wednesday, July 19th Thursday, July 20th <b>(Two-Day Workshop)</b>
	Engineering Challenge Part II: Green Building Design	Grades K-12	Tuesday, July 25th Wednesday, July 26th <b>(Two-Day Workshop)</b>

	Name of Workshop	Grade Levels	Dates
August Workshops	Biomechanics of Life- Using Physics to Explore the Diversity of Organisms	Grades 7-12	Saturday, August 5th <b>(One Day Workshop)</b>

## **2017 CALTEACH SUMMER INSTITUTE:**

### **TEACHING NGSS WITH LEGO ROBOTICS**

#### WHAT?

LEARN HOW TO COMBINE LEGO EDUCATION WEDO 2.0 SOLUTIONS WITH NEXT GENERATION SCIENCE STANDARDS (NGSS) TO CREATE ENGAGING AND HIGH IMPACT LESSONS THAT WILL GET YOUR ELEMENTARY STUDENTS GAIN A DEEPER INSIGHT INTO SCIENCE.

#### WHO?

THIS WORKSHOP IS OPEN TO ALL ELEMENTARY SCHOOL TEACHERS (GRADES 2-4)

#### WHEN AND WHERE?

UC MERCED CAMPUS: MONDAY, JUNE 12TH TIME: 9:00 AM TO 4:30PM

#### WHY?

- MAKE LEARNING SCIENCE FUN AND ENGAGING IN CLASSROOMS
- TEACHERS WHO ATTEND THIS WORKSHOP WILL BE ALLOWED TO CHECK OUT KITS FOR THEIR CLASSROOM USE AFTERWARDS
- ATTENDEES WILL ALSO BE GIVEN THEIR OWN LEGO KIT AFTER COMPLETING THE WORKSHOP



### WHERE DO I APPLY?

- THIS WORKSHOP IS FIRST COME, FIRST SERVE.
- SPOTS ARE LIMITED TO THE FIRST 25 PARTICIPANTS!
- LINK TO REGISTER FOR WORKSHOP: <u>HTTPS://GOO.GL/FORMS/</u> ZGFDEWHNUMY5DC8P2



## Cal Teach Summer Institute

#### Intro to Computer Programming



When?

June 12th & 13th UC Merced 9 am- 4:30 pm Learn the basics of coding (No experience necessary!)

What?



This workshop is open to all interested teachers.

Why?

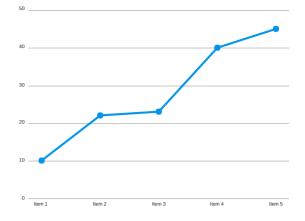
- Join the 21st century and prepare your kids for the future.
- Plus, teachers can apply for graduate credit through UC Merced Extension.

Where do I apply?

This FREE workshop is limited to the first 25 to register Link to register for workshop: https://goo.gl/forms/UK56LG689CR6UQmI3

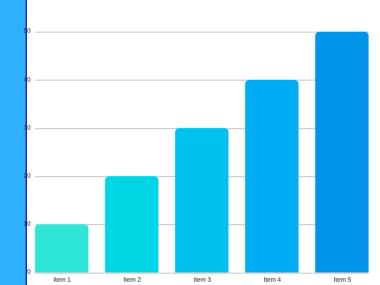


# 2017 CALTEACH SUMMER INSTITUTE Delving into Data in a NGSS World



## What?

DATA IN THE REAL WORLD IS OFTEN MESSY AND CONFUSING. AIMED AT HELPING YOU AND YOUR STUDENTS BECOME EXPERTS IN DATA GENERATION AND ANALYSIS.



Who? Open to all teachers grades K-12

> When? June 15 & 16 at UC Merced

## Why?

TEACHERS CAN APPLY FOR GRADUATE CREDITS UPON COMPLETING THE WORKSHOP TEACHERS WILL ALSO LEARN ABOUT INCORPORATING REAL TIME DATA IN THEIR CLASSROOMS.

THIS FREE WORKSHOP IS LIMITED TO THE FIRST 25 TO REGISTER CLICK HERE TO REGISTER HTTPS://GOO.GL/FORMS/XJ8WQ46SGRSBYHZD2



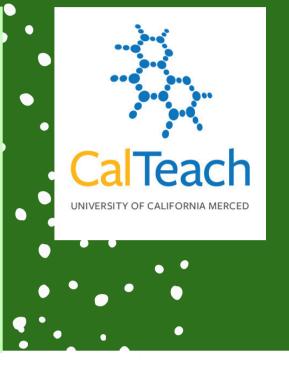
2017 CalTeach Summer Institute Fairy Shrimp, Tiger Salamanders, & More: Life Cycles of Vernal Pools

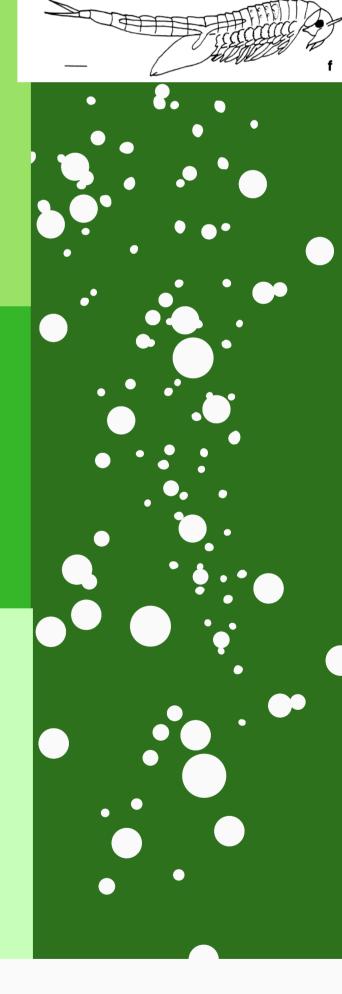
## What?

Learn techniques & methods to teach life cycles of various creatures in the vernal pools and how to incorporate impactful ideas like sustainable livestock

## Who?

This workshop is open to all teachers from grades 5-12





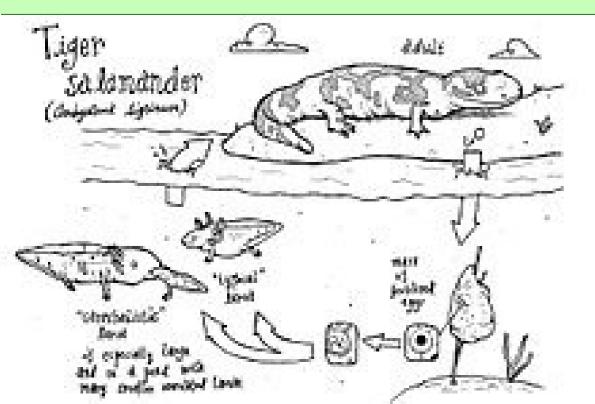
## When?

Thursday, June 22nd On the Merced Vernal Pools Natural Reserve Behind UC Merced

## Why?

Graduate credits will be available for purchase through the UC Merced extension. Teachers will learn about relatable concepts that can be

applied in their classrooms



This FREE workshop is limited to the first 25 to register Link to register: https://goo.gl/forms/M9rwt9Qvc3WTi0173



## Engineering Challenge Part 1: Ocean Pollutants



Use engineering practices to learn how to contain and clean up an oil spill.

When

June 23rd UC Merced



Who

Open to grades 7-12 teachers

Teachers can purchase graduate units upon completing the workshop Teachers will learn about the engineering concepts that can be applied in their classrooms.

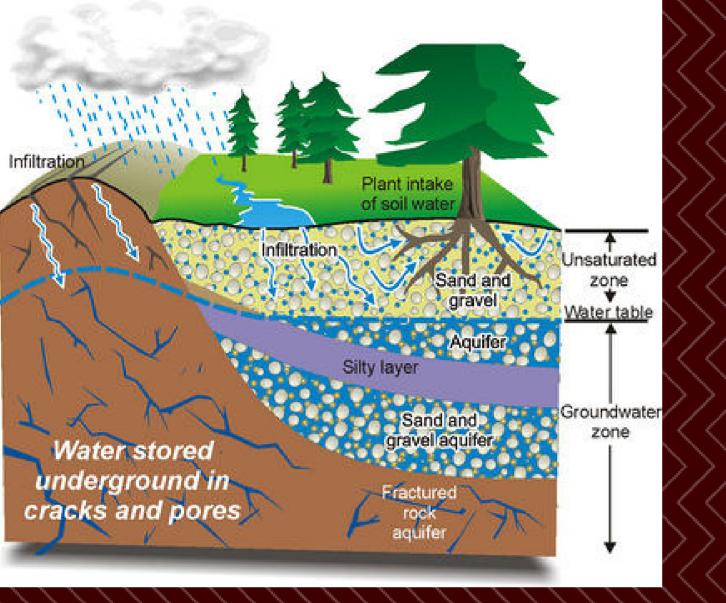
Where do I apply?

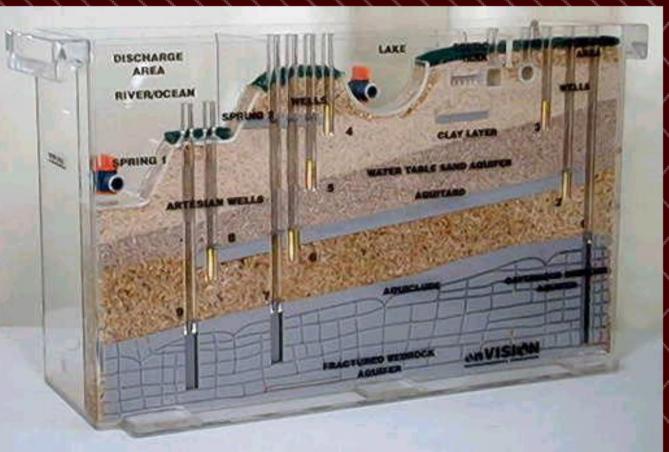
This workshop is limited to the first 25 to register Link to register: https://goo.gl/forms/goJt6rUE1Mgzmckr1



## Calteach Summer Institute

## Water Works Part 1: Explore the Water beneath your Feet!





This workshop is designed to help teachers learn how to use water models to teach about ground water and sustainability

What?

Who?

This workshop is open to all K-6 teachers

June 26 9:00am-4:30 pm UC Merced

Earn graduate credit from UC Merced Extensionand add relevant context to your clasrooms!

## Where do I apply?

This FREE workshop is limited to the first 25 to register! Register here: https://goo.gl/forms/iRyEcX6kuxnJFvgJ3



## 2017 CalTeach Summer Institute Focus on Physical Science: Force, Motion, Energy and More!

### What is it?

A two-day workshop that will focus on NGSS for physical science

## Who should go?

The workshop is open to all 4-8th grade teachers

### When is it?

June 27th & June 28th 9:00 am to 4:30 pm at UC Merced CalTeach

## Why go?

- Apply for graduate credit from UC Merced Extension
- Get inspired bring physics into any classroom!





This FREE workshop is limited to the first 25 to register. Register here: https://goo.gl/forms/cTz17Yp kvJhUpA9s2

Cal Teach Summer Institute

**Transforming Instruction & HW** 

What?

Engage your students through effective homework and instructional strategies

Who?

This workshop is open to all interested teachers

When?

July 11 at UC Merced 9 am- 4:30 pm

Why?

- Make learning fun and hands on.
- Apply for graduate credits through the UC Merced Extension

Where do I apply?

This FREE workshop is limited to the first 25 to register Link to register for workshop: https://goo.gl/forms/6JB1AeUcJcvrdXXE3



Cal Jeach Summer Institute

Water Works Part 2: Investigate the Watershed From Summit to Sea



Learn the benefits of hands-on modeling and get messy with stream tables outside your classroom. Used for various NGSS standards across multiple grade levels.

What?

When!

July 19th & 20th UC Merced 9:30 am- 4:30 pm

This workshop is open to 4th-12th grade teachers!

Get out of the classroom and take advantage of natural phenomena.
Teachers can apply for graduate credit through UC Merced extension.

Where do I apply?

This FREE workshop limited to the first 25 to register. Link to register for workshop: https://goo.gl/forms/fKDnQhjNJAPdbfip1



Cal Teach Summer Institute

#### Engineering Challenge Part 2: Green Building Design



Learn the benefits of hands-on modeling and learn sustainable living and building. Incorporate engineering practices across multiple grade levels.



Who?

This workshop is open to all interested teachers.

When?

July 25th & 26th 9:30- 4:30 UC Merced

Why?

Get experience with practical and relevant information that has daily impact. Plus, teachers can apply for graduate credit.

Where do I apply?

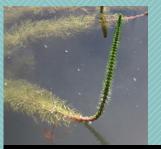
This FREE workshop is limited to the first 25 to register.

Link to register for workshop: https://goo.gl/forms/n2qQoT958SWJUE4C3



Cal Teach Summer Institute

Biomechanics of Life-Using Physics to Explore the Diversity of Organisms



What?

Explore the principles underlying shapes, sizes and locomotions of animals and plants and use models and hands-on examples to show how natural selection has shaped different forms.



When? August 5 9 am- 4:30 pm UC Merced

What

This workshop is open to 7-12th grade teachers

Where do I apply?

This FREE workshop is limited to the first 25 to register Link to register : https://goo.gl/forms/2Ulikc4YnuhYS3lj1

