## 2018 CALTEACH SUMMER INSTITUTE WORKSHOPS

### JUNE WORKSHOPS

<table>
<thead>
<tr>
<th>Name of Workshop</th>
<th>Grade Levels</th>
<th>Dates</th>
<th>Location</th>
<th>Registration Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mapping your World</td>
<td>K-12 *</td>
<td>June 13th (one-day workshop)</td>
<td>UC Merced</td>
<td><a href="https://goo.gl/forms/wxvUcvmlnwtCFyDT2">https://goo.gl/forms/wxvUcvmlnwtCFyDT2</a></td>
</tr>
</tbody>
</table>

* Learn about various landforms on earth and gain basic map reading skills. Participants will receive $100 stipend upon completion.

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<tr>
<td></td>
<td></td>
<td>June 21st &amp; June 22nd (two-day workshop)</td>
<td>Fresno (Location TBD)</td>
<td><a href="https://goo.gl/forms/wIA82ad5cVhauOpF2">https://goo.gl/forms/wIA82ad5cVhauOpF2</a></td>
</tr>
</tbody>
</table>

This workshop will help teachers learn materials related to teaching AP Computer Science A in their classrooms. Participants will receive $100 stipend upon completion.

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<tbody>
<tr>
<td>Hands on NGSS Workshop</td>
<td>K-2nd</td>
<td>June 19th &amp; June 20th (two-day workshop)</td>
<td>UC Merced</td>
<td><a href="https://goo.gl/forms/9ff7ejWkz3Zxwd5Z2">https://goo.gl/forms/9ff7ejWkz3Zxwd5Z2</a></td>
</tr>
</tbody>
</table>

Experience a 5E NGSS lesson geared for K-2 and dive into understanding the CA-NGSS standards & framework. Create and share a lesson of your own with support from CalTeach faculty. Participants will receive $100 stipend upon completion.

Graduate credits will be available for purchase for all of these workshops through UC Merced Extension.

* These K-12 workshops are more catered to adult learning and are skill based as well as content focused.
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<tbody>
<tr>
<td>Hands on NGSS Workshop</td>
<td>Grades 3rd - 5th</td>
<td>June 21st &amp; June 22nd (two-day workshop)</td>
<td>UC Merced</td>
<td><a href="https://goo.gl/forms/1kcSDs9jit0UQBTr1">https://goo.gl/forms/1kcSDs9jit0UQBTr1</a></td>
</tr>
<tr>
<td>Science &amp; Lego Robotics</td>
<td>Grades 2nd - 4th</td>
<td>June 26th &amp; June 27th (two-day workshop)</td>
<td>UC Merced</td>
<td><a href="https://goo.gl/forms/tZQk6RCeipKLK8dv1">https://goo.gl/forms/tZQk6RCeipKLK8dv1</a></td>
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<tr>
<td></td>
<td></td>
<td>June 28th &amp; June 29th (two-day workshop)</td>
<td>Fresno (Location TBD)</td>
<td><a href="https://goo.gl/forms/pBY7dtwLvI04AMfM2">https://goo.gl/forms/pBY7dtwLvI04AMfM2</a></td>
</tr>
</tbody>
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Experience a 5E NGSS lesson geared for grades 3rd - 5th and dive into understanding the CA-NGSS standards & framework. Create and share a lesson of your own with support from CalTeach faculty.

Participants will receive $100 stipend upon completion.

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.

Participants will get to take home a lego kit & be able to check out our classroom lego kits for the academic year.

* These K-12 workshops are more catered to adult learning and are skill based as well as content focused.
## JULY WORKSHOPS

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<thead>
<tr>
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<tbody>
<tr>
<td>Dynamic Earth 1 (Minerals, Rocks, &amp; Plate tectonics)</td>
<td>K-12 Adult Learning</td>
<td>July 18th &amp; July 19th (two-day workshop)</td>
<td>UC Merced</td>
<td><a href="https://goo.gl/forms/PiwPbL3CStUkEeus2">https://goo.gl/forms/PiwPbL3CStUkEeus2</a></td>
</tr>
<tr>
<td>* Earth Science Boot Camp</td>
<td></td>
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<tr>
<td>All About DNA &amp; RNA</td>
<td>Grades 9th - 12th</td>
<td>July 19th &amp; July 20th (two-day workshop)</td>
<td>UC Merced</td>
<td><a href="https://goo.gl/forms/09snaLQQtryLSgCD3">https://goo.gl/forms/09snaLQQtryLSgCD3</a></td>
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<tr>
<td>Robotics &amp; Integrated Math</td>
<td>Grades 9th -12th</td>
<td>July 20th (one-day workshop)</td>
<td>UC Merced</td>
<td></td>
</tr>
</tbody>
</table>

**Learn about the rock cycle and minerals in our current environment and what rocks can tell us about our past environments.**

**Learn how to use the MIT's DNA and RNA kits. These kits are designed to teach processes and structure of DNA and RNA models in a hands on way.**

**Participates will receive $100 stipend upon completion**

**Teachers will learn how to combine curriculum from robotics in teaching topics related to integrated math 1, 2, and 3**

**Participants will receive a take home robotics kit for their classroom use**

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Graduate credits will be available for purchase for all of these workshops through UC Merced Extension.

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<tr>
<td>Dynamic Earth 2 (Volcanoes &amp; Earthquakes)</td>
<td>K-12 Adult Learning</td>
<td>July 23rd &amp; July 24th</td>
<td>UC Merced</td>
<td><a href="https://goo.gl/forms/DVJNmNeGNA7DuNd2">https://goo.gl/forms/DVJNmNeGNA7DuNd2</a></td>
</tr>
<tr>
<td>* Earth Science Boot Camp</td>
<td></td>
<td>(two-day workshop)</td>
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<td></td>
</tr>
<tr>
<td>Assembling California: A guide to California’s geologic history</td>
<td>K-12 Adult Learning</td>
<td>July 30th &amp; July 31st</td>
<td>UC Merced</td>
<td><a href="https://goo.gl/forms/EmTXau4scNKXHuzP2">https://goo.gl/forms/EmTXau4scNKXHuzP2</a></td>
</tr>
<tr>
<td>* Earth Science Boot Camp</td>
<td></td>
<td>(two-day workshop)</td>
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</tr>
<tr>
<td>Solar Car Challenge</td>
<td>Grades 7th &amp; 8th</td>
<td>July 30th to August 1st</td>
<td>UC Merced</td>
<td><a href="https://goo.gl/forms/2jZLbAbivheUJ4Hq2">https://goo.gl/forms/2jZLbAbivheUJ4Hq2</a></td>
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<tr>
<td></td>
<td></td>
<td>(three-day workshop)</td>
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Teachers will learn about the structure of earth and how it is linked to volcanoes, mountain building, and earthquakes. Participants will also learn about research related to mountains and mitigation of earth’s natural hazards.

Participants will receive $100 stipend upon completion.

Teachers will learn about using solar energy while integrating engineering designs and scientific concepts. Participants will be challenged to think creatively in order to design and construct a solar-powered model car. Participants will be eligible to enroll their students in next years UC Merced Solar Challenge.

Participants will receive a solar car kit and will be able to have their middle school classroom participate in the 2019 Solar Car challenge at UC Merced in Spring.

Graduate credits will be available for purchase for all of these workshops through UC Merced Extension.

* These K-12 workshops are more catered to adult learning and are skill based as well as content focused.
CalTeach 2018
Summer Institute
MAPPING YOUR WORLD

EARTH SCIENCE BOOT CAMP

Learn about various landforms on Earth and gain basic map reading skills

WHO: K-12 TEACHERS*
WHEN: JUNE 13TH
WHERE: UC MERCED

HOW TO APPLY

This FREE workshop is limited to the first 25 people that register. (Graduate course credits are available for purchase through UC Merced Extension).

Link to register: https://goo.gl/forms/S5NIKGafwT2KmqU12

*THIS WORKSHOP IS MORE CONTENT HEAVY AND CATERS TO ADULT LEARNING

SPONSORED BY:

PRESENTED BY:
INTRODUCTION TO COMPUTER PROGRAMMING

This FREE workshop will help teachers learn materials related to teaching AP Computer Science A in their classrooms.

WHO
High School Grade Level Teachers

WHEN & WHERE
June 18 & 19 (UC Merced)
June 21 & 22 (Fresno)

HOW TO APPLY
Spots are limited to the first 25 people that register. (Graduate course credits are available for purchase through UC Merced Extension).

Use the registration link below to apply:

UC Merced location
https://goo.gl/forms/SAgmqQweW7GP4x5i1

Fresno location
https://goo.gl/forms/jvCEZmFVcY1XNR62

SPONSORED BY:

CalTeach 2018 SUMMER INSTITUTE

PRESENTED BY:

Educational Employees CREDIT UNION

UNIVERSITY OF CALIFORNIA MERCED
HANDS ON NGSS WORKSHOP

EXPERIENCE A 5E NGSS LESSON GEARED FOR K-2 AND DIVE INTO UNDERSTANDING THE CA-NGSS STANDARDS & FRAMEWORK. CREATE AND SHARE A LESSON OF YOUR OWN WITH SUPPORT FROM CALTEACH FACULTY.

WHO: K-2nd grade level teachers
WHEN: June 19 & 20
WHERE: UC Merced

HOW TO APPLY:
This FREE workshop is limited to the first 25 people that register.
(Graduate course credits are available for purchase through UC Merced Extension).

**Register through the link below:
https://goo.gl/forms/lzZMwn3J9yOwimnZ1
HANDS ON NGSS WORKSHOP

EXPERIENCE A 5E NGSS LESSON GEARED FOR GRADES 3RD - 5TH AND DIVE INTO UNDERSTANDING THE CA-NGSS STANDARDS & FRAMEWORK. CREATE AND SHARE A LESSON OF YOUR OWN WITH SUPPORT FROM CALTEACH FACULTY.

WHO: 3rd-5th grade level teachers

WHEN: June 21 & 22

WHERE: UC Merced

HOW TO APPLY: This FREE workshop is limited to the first 25 people that register. (Graduate course credits available for purchase through UC Merced Extension).

**Register through the link below: https://goo.gl/forms/FhhYLS3kiueYknnq2**
SCIENCE & LEGO ROBOTICS

CALTEACH 2018 SUMMER INSTITUTE

Learn how to combine Lego Education WeDo 2.0 solutions with Next Generation Science Standard (NGSS) to create engaging and high impact lessons that will get your elementary students gain a deeper insight into science.

WHO
Teachers of 2nd - 4th grade students

WHEN & WHERE
June 26 & 27 at UC Merced
June 28 & 29 in Fresno (Location TBD)

HOW TO APPLY
This FREE workshop is limited to the first 25 people that register. (Graduate course credits are available through UC Merced Extension).

Register using the link below:
- UC Merced location: https://goo.gl/forms/bxwXTA5Q9davOjsV2
- Fresno location: https://goo.gl/forms/eJRjAagwbNLqnZi92

SPONSORED BY: PRESENTED BY:
Dynamic Earth 1
Minerals, Rocks, & Plate Tectonics

Learn about the rock cycle and minerals in our current environment and what rocks can tell us about our past environments.

**WHO**
K-12 Teachers*

**WHEN**
July 18 & 19

**WHERE**
UC Merced Campus

**HOW TO APPLY**
This FREE workshop is limited to the first 25 people that register. (Graduate course credits are available for purchase through UC Merced Extension).

Register using the link below:
https://goo.gl/forms/1FINIADTPS19CK23

Sponsored by:
CalTeach

Presented by:
Education Employees Credit Union

*This workshop is more content heavy and caters to adult learning*
ALL ABOUT DNA & RNA
Learn how to use the MIT's DNA & RNA kits. These kits are designed to teach processes and structure of DNA & RNA models in a hands on way.

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<td>9-12 grade teachers</td>
<td>July 19 &amp; 20 (Two-day workshop)</td>
<td>UC Merced Campus</td>
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HOW TO APPLY
This FREE workshop is limited to the first 25 people that register. (Graduate course credits are available for purchase through UC Merced Extension).

***Register using the link below:

https://goo.gl/forms/xDW07YiK7cAivzxG3

SPONSORED BY:

![Educational Employees Credit Union Logo]

PRESENTED BY:

![CalTeach Logo]
CalTeach 2018 Summer Institute

ROBOTICS & INTEGRATED MATH

Teachers will learn how to combine curriculum from robotics in teaching topics related to integrating math 1, 2, & 3.

WHO
9-12th grade teachers

WHEN
July 20

WHERE
UC Merced Campus

How to Apply
This FREE workshop is limited to the first 25 people that register. (Graduate course credits are available through UC Merced Extension).
Register using the link below: https://goo.gl/forms/I0tzC4E3hwWpJ0q12

Sponsored By:
DYNAMIC EARTH 2

Volcanoes & Earthquakes

Teachers will learn about the Earth's structure and how it is linked to volcanoes and mountain building. Participants will also learn about the Earth's natural hazards and how they are formed.

WHO: K-12 Teachers*
WHERE: UC Merced campus

How to Apply

This FREE workshop is limited to the first 25 people that register. (Graduate course credits are available for purchase through the UC Merced Extension).

Register using the link below:
HTTPS://GOO.GL/FORMS/GJK1S3CIRQQRYJPZ2

*THIS WORKSHOP IS MORE CONTENT HEAVY AND CATERS TO ADULT LEARNING
ASSEMBLING CALIFORNIA:
A guide to California's geological history

COME AND LEARN ABOUT THE BASICS OF CALIFORNIA GEOLOGIC HISTORY!

JULY 30TH & 31ST | UC MERCED CAMPUS | K-12 TEACHERS*

HOW TO APPLY

THIS FREE WORKSHOP IS LIMITED TO THE FIRST 25 PEOPLE THAT REGISTER. (GRADUATE COURSE CREDITS ARE AVAILABLE FOR PURCHASE THROUGH UC MERCED EXTENSION).

REGISTER USING THE LINK BELOW:
HTTPS://GOO.GL/FORMS/mXuQ8EeWl9jO6PQ1

*THIS WORKSHOP IS MORE CONTENT HEAVY AND CATERS TO ADULT LEARNING
CALTEACH PRESENTS

SOLAR CAR CHALLENGE

TEACHERS WILL LEARN ABOUT USING SOLAR ENERGY WHILE INTEGRATING ENGINEERING DESIGNS AND SCIENTIFIC CONCEPTS. PARTICIPANTS WILL BE CHALLENGED TO THINK CREATIVELY IN ORDER TO DESIGN AND CONSTRUCT A SOLAR-POWERED MODEL CAR.

JULY 30TH TO AUGUST 1ST
• UC MERCED CAMPUS •
OPEN TO 7TH & 8TH GRADE TEACHERS

GRADUATE COURSE CREDITS ARE AVAILABLE FOR PURCHASE THROUGH UC MERCED EXTENSION.

HOW TO APPLY:
THIS FREE WORKSHOP IS LIMITED TO THE FIRST 25 PEOPLE THAT REGISTER.
REGISTER USING THE LINK BELOW: HTTPS://GOO.GL/FORMS/WXLP4RAWJ5SR68N92