

# 2018 Makahiki ODE STEM Workshop Registration

# **Class Catalog**

# **Event Contacts**

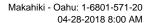
Name Title Phone Email

Will Hartzell ODE Workshop Registration 808.728.2355 willhartzell2@gmail.com

Registration opens March 09, 2018
Visit www.scoutingevent.com/104-2018ODESTEM to register









2018 Makahiki ODE STEM Workshop Registration at Blaisdell Center

# Makahiki ODE STEM Workshops (Scheduled Classes)

**ODE136** 10-10:45 AM

Room 5



### **Altino Coding Cars**

Coding for the non-coder. Altino Coding Cars for kids and adults. Learn to code C/C++ in 5 minutes using the latest teaching technology from South Korea where computer science will become a mandatory subject starting this year. Recommended for students age 10 and up.

Maximum number of participants: 25

**ODE136** 11-11:45 AM

Room 5



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Maximum number of participants: 25

**ODE119** 12:30-1:15 PM

Room 6



#### **Bristle Bot Racers**

Construct a Bristlebot, a fun, exciting robot made of a vibrating cell phone motor and a toothbrush head. Design and construct a Bristlebot to go the fastest in a straight line. Compete with other Bristlebots for bragging rights. Recommended for ages 8 and up.

Maximum number of participants: 30

**ODE119** 1:30-2:15 PM

Room 6



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Construct a Bristlebot, a fun, exciting robot made of a vibrating cell phone motor and a toothbrush head. Design and construct a Bristlebot to go the fastest in a straight line. Compete with other Bristlebots for bragging rights. Recommended for ages 8 and up. Maximum number of participants: 30

**ODE137** 

Room 8

12:30-1:15 PM



### **Build Your Own Water Filter**

Engineers design treatment systems for our water resources. To make water safe for drinking, it must go through a process to remove contaminants. Filtration is one step in the water treatment process which removes most, but not all impurities. Come and learn about the engineering design process to design, build and test your own water filtration system. Recommended for students age 9 to 12.

Maximum number of participants: 30

**ODE137** 1:30-2:15 PM

Room 8



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ODE113 Room 9 10-10:45 AM

### Chain Reactions: Fun with Kinetic Energy

Use the engineering design process to explore and learn about kinetic energy. Use everyday materials including sticks and cups to create chain reactions that are sure to entertain and amaze. Recommended for students age 7 and up.

Maximum number of participants: 25

ODE113 Room 9 11-11:45 AM



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Use the engineering design process to explore and learn about kinetic energy. Use everyday materials including sticks and cups to create chain reactions that are sure to entertain and amaze. Recommended for students age 7 and up.

Maximum number of participants: 25

ODE128 Room 8 10-10:45 AM



### **Cool Chemistry for Everyone**

Amuse and amaze your friends with cool chemistry demonstrations and "magic" using common material that will make you the life of the party! Recommended for students age 9 and up.

Maximum number of participants: 25

**ODE128** 

11-11:45 AM

Room 8



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Amuse and amaze your friends with cool chemistry demonstrations and "magic" using common material that will make you the life of the party! Recommended for students age 9 and up.

Maximum number of participants: 25

ODE101

10-10:45 AM





# **Energy UNPLUGGED**

Sponsored by Hawaii Energy: Help Hawai'l lead the nation in Energy Efficiency! Learn how to make money by becoming an "Energy Entrepreneur" and help reap the benefits of making smart energy choices in your home. Recommend for students grade 5 and older.

Maximum number of participants: 25

ODE101 Room 3 11-11:45 AM



# **Energy UNPLUGGED**

Sponsored by Hawaii Energy: Help Hawai'l lead the nation in Energy Efficiency! Learn how to make money by becoming an "Energy Entrepreneur" and help reap the benefits of making smart energy choices in your home. Recommend for students grade 5 and older.

Maximum number of participants: 25

**ODE138** 

12:30-1:15 PM

Room 9



# **Engineering is the New Cool**

College of Engineering's Engineering Ambassadors will provide hands on opportunity to building balloon towers while sharing an overview of the College and related research for students interested in Engineering. Recommended for students age 9 and up.

Maximum number of participants: 30

**ODE138** 

1:30-2:15 PM

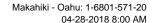
Room 9



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**ODE129** 

10-10:45 AM

Room 10



**Experimental Motors** 

Build a simple motor and use the engineering design process to test, re-design, and retest your prototype. Recommended for students age 11 and up.

Maximum number of participants: 25

**ODE129** 

**9** 11-11:45 AM

Room 10



**Experimental Motors** 

Build a simple motor and use the engineering design process to test, re-design, and retest your prototype. Recommended for students age 11 and up.

Maximum number of participants: 25

ODE114

12:30-1:15 PM

Room 3



**Feather Fall Parachute Deployment** 

Design and build a parachute to safely and accurately land in a hostile environment to get much needed equipment to our stranded astronauts. "Bragging rights" for best aim and slowest descent. Learn about aerodynamics, free fall and air resistance forces.

Maximum number of participants: 30

ODE114 Room 3 1:30-2:15 PM



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Design and build a parachute to safely and accurately land in a hostile environment to get much needed equipment to our stranded astronauts. "Bragging rights" for best aim and slowest descent. Learn about aerodynamics, free fall and air resistance forces.

Maximum number of participants: 30

ODE134 Room 5 12:30-1:15 PM



FEST (Families Exploring Science Together): Science is Fun!

How science really works! Curiosity + Joy + Dreams + Thrills + Wonder + Interest + Surprise + Creativity = Discovery....and it's Fun!! Discover and experience through hands on, minds on science activities and demonstrations....surface tension of water, Bernoulli's principle, Center of Gravity, electricity, density of liquids, rainbows...take home a wind tube, an energy ball, a balancing stick, diffraction glasses, preform bottle to continue experimenting. Recommended for students ages 5 to 12.

Maximum number of participants: 30

ODE134

1:30-2:15 PM

Room 5



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Maximum number of participants: 30

**ODE133** 

12:30-1:15 PM

Room 2



First Aide

Learn first aide from Chaminade University's School of Nursing

Maximum number of participants: 30

**ODE133** 

1:30-2:15 PM

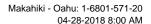
Room 2



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2018 Makahiki ODE STEM Workshop Registration at Blaisdell Center

**ODE131** Room 12 11-11:45 AM

#### Hardware Science

Join us for a fun grab bag of hands-on activities! Ordinary objects come together in extra ordinary ways to explore science in our everyday life! Recommended for students age 8 and up.

Maximum number of participants: 25

**ODE131** Room 12 12:30-1:15 PM



#### **Hardware Science**

Join us for a fun grab bag of hands-on activities! Ordinary objects come together in extra ordinary ways to explore science in our everyday life! Recommended for students age 8 and up.

Maximum number of participants: 30

**ODE127** 

10-10:45 AM





### **LEGO Master-Building for EARTHQUAKES!**

As a LEGO Master-Builder, you will be challenged to design a LEGO tower to withstand a simulated earthquake event using your own Shake Table, and test your design against others. Whose will be the last one standing?? Recommended for ages 5

Maximum number of participants: 25

**ODE127** 

11-11:45 AM

Room 7



### **LEGO Master-Building for EARTHQUAKES!**

As a LEGO Master-Builder, you will be challenged to design a LEGO tower to withstand a simulated earthquake event using your own Shake Table, and test your design against others. Whose will be the last one standing?? Recommended for ages 5 through 10.

Maximum number of participants: 25

**ODE106** Room 2

10-10:45 AM



# Mystery & Intrigue: The Wide World of Electricity

Sponsored by Hawaiian Electric Company: Learn some exciting aspect of electricity. Build a battery storage experiment that should impress your friends, family and teachers. As always, no previous experience necessary; just bring your eagerness to participate and learn. In fact, you may be able to teach our engineers something new. Recommended for students grade 3 and older...

Maximum number of participants: 25

**ODE106** 

11-11:45 AM

Room 2



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Maximum number of participants: 25

**ODE130** 

11-11:45 AM

Room 11



#### Plate Tectonics & the Formation of Islands

Plate Tectonics are one of the major forces that shapes our planet. Join us as the Keiki Mineral Club shows you how Plate Tectonics work, how the islands of Hawai'i were formed and as we take you 3,000 feet underwater to share some rarely-seen photos of our newest island Lihi. Recommended for students age 6 to adult.





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**ODE130** 

12:30-1:15 PM

Room 11



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Maximum number of participants: 30

**ODE132** Room 4

12:30-1:15 PM



# Slime Experiment: The Science Behind the Slime

Is it a solid? Is it a liquid? It's slime! Come learn about how slime is made and the science behind it and then take home your own slime creation. Recommended for students age 6 and older.

Maximum number of participants: 30

ODE132 Room 4

1:30-2:15 PM



# Slime Experiment: The Science Behind the Slime

Is it a solid? Is it a liquid? It's slime! Come learn about how slime is made and the science behind it and then take home your own slime creation. Recommended for students age 6 and older.

Maximum number of participants: 30

**ODE124** 

10-10:45 AM Room 4



### **Space Lander Mission**

Aliens are coming! Experience the Engineering Design Process and explore shockabsorption and stabilization by designing and constructing a lander to help friendly aliens land safely on Earth. Recommended for students age 8 to adult.

Maximum number of participants: 25

**ODE124** 

11-11:45 AM Room 4



### **Space Lander Mission**

Aliens are coming! Experience the Engineering Design Process and explore shockabsorption and stabilization by designing and constructing a lander to help friendly aliens land safely on Earth. Recommended for students age 8 to adult.

Maximum number of participants: 25

**ODE126** Room 6

10-10:45 AM



# Storytelling with Ozbots!

Design your own story with an Ozobot (a miniature robot) using visual codes such as line following + color sensing. Recommend for students age 8 and up.

Maximum number of participants: 25

**ODE126** 

11-11:45 AM

Room 6



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Design your own story with an Ozobot (a miniature robot) using visual codes such as line following + color sensing. Recommend for students age 8 and up.

Maximum number of participants: 25

**ODE125** 

12:30-1:15 PM

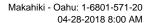
Room 7



#### Straw Rockets & Kerbal!

Experience the basic physics of rocketry first hand using nothing more than drinking straws and air. A demonstration will also be given of the kind of rocket science that can be done with state of the art gaming software. Recommend for all ages.







2018 Makahiki ODE STEM Workshop Registration at Blaisdell Center

**ODE125** 

1:30-2:15 PM

Room 7



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Experience the basic physics of rocketry first hand using nothing more than drinking straws and air. A demonstration will also be given of the kind of rocket science that can be done with state of the art gaming software. Recommend for all ages.

Maximum number of participants: 25

ODE104

10-10:45 AM

Room 1



### **Workings of the Mammalian Heart**

Sponsored by Gehan Devendra, MD: Ever wonder what a heart looks like? It certainly doesn't look like the perfect valentine's day hearts. Come find out what it really looks like and even see what's inside and find out how it works as you dissect a sheep's heart. Recommended for students grades 8 and older

Maximum number of participants: 25

**ODE104** 

11-11:45 AM

Room 1



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