

SUMMER CAMPS



UC Davis School of Education – Adventures In Enrichment

Invites You To Have a

STEM-Tastic Summer

(Science, Technology, Engineering, and Math)

6 weeks of fun and enrichment

June 17 – August 3

(no camps the week of July 1)



Open to youth entering grades 1-8 in the fall of 2019



UC DAVIS
SCHOOL OF EDUCATION



UC DAVIS SCHOOL OF EDUCATION SUMMER CAMPS



Welcome!

Choose the camp based upon the campers grade level in the fall of 2019. For campers attending both the regular camp and the High Velocity camp, there will be supervision provided between 2-2:30 p.m. and 5:30-6:00 p.m. at no additional charge. We will also provide an early morning program from 7:30-8:30 a.m. and an afternoon extended day program from 2-6 p.m.

Register early and save!

Early Bird Special: February 23 – April 07

Regular Camps: \$275/week • **High Velocity:** \$175/week

On-going Registration after April 08

Regular Camps: \$295/week • **High Velocity:** \$195/week

Camp Sessions

AM Extended Care: 7:30 - 8:30 a.m.

AM Camp Session: 8:30-2:00 p.m.

PM Camp Session: (High Velocity) 2:30-5:30 p.m.

PM Extended Care: 2:00-6:00 p.m.



► **Lypg'39/43"**

I tcf gu'3/4<" Wprgcuj "I qwt "Y kf "Ukf g
I tcf gu'5/6<" F ki kcnTgr { "Ej cngpi g
I tcf gu'6/7<" Kpgto gf kcvg "Tqdqvku"
I tcf gu'8/: <" Dgeqo kpi "c "UVGO "O cngt "*****
I tcf gu'8/: <" Ego r gkxkg "Tqdqvku"

J H J "XGNQEKV["

I tcf gu'3/4<" Eqf kpi "O qwug "Gzr mtcvkqp "*****
I tcf gu'5/6< Vj g "I tgcV "Vq { "F guki p "Ej cngpi g "*****
I tcf gu'8/9<" O kpgetchv
I tcf gu'6-8<" Cf xcpvgf "Tqdqvku"

► **Lypg'46/4: "**

I tcf gu'3/4<" Uggf "Tguewg
I tcf gu'3/4<" UqrcT "J qwug "F guki p "Ej cngpi g"
I tcf gu'5/6< Tckpy cvgt "Twpqhi "Ej cngpi g "*****
I tcf gu'8/9<" Ego r gkxkg "Tqdqvku"
I tcf gu'9/: <" Dgeqo kpi "c "UVGO "O cnr

J H J "XGNQEKV[""

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► **Lyn[":/34**

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I tcf gu'5/6<" Uekpeg "qh "vj g "J wo cp "Dqf { ""
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I tcf gu'8/: <" O cnkpi "y kj "O wnko gf k "

J H J "XGNQEKV["

I tcf gu'3/4<" UqrcT "J qwug "F guki p "Ej cngpi g"
I tcf gu'5/6<" Dwi "Eco r "
I tcf gu'7/8<" **Eco r "Ego kpi "Uqpp#**
I tcf gu'8/9<" **Eco r "Ego kpi "Uqpp#**

► **Lyn["'37/3: "**

I tcf gu'3/4<" Uj cf qy "Dqz "Vj gcvgt "
I tcf gu'5/6<" Uekpeg "qh "Vj g "J wo cp "Dqf { "
I tcf gu'5/6< Vj g "Y qtrf "qh "Dwi u
I tcf gu'7/8<" I co g "F guki p
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J H J "XGNQEKV["

I tcf gu'3/4< J gkeqr vgt "J cpi "Vko g "*****
I tcf gu'5/6<" Gzr mtcvkqp "kp "vj g "Y qtrf "qh "Ctv "
I tcf gu'7/8<" **Eco r "Ego kpi "Uqpp"**
I tcf gu'7/8< **Eco r "Ego kpi "Uqpp**

► **Lyn["'44/48"**

I tcf gu'3/4<" UVGO "O cng/K "Vcng/K "*****
I tcf gu'5/6<" Vj g "Y qtrf "qh "Dwi u
I tcf gu'7/8< **Eco r "Ego kpi "Uqpp# "*******
I tcf gu'9/: <" **Eco r "Ego kpi "Uqpp#**

J H J "XGNQEKV["

I tcf gu'3/4< Gzr mtcvkqp "kp "vj g "Y qtrf "qh "Ctv "
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I tcf gu'9/: <" **Eco r "Ego kpi "Uqpp#**

► **Lyn["'52'6'Cwi.wv'5"**

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J H J "XGNQEKV[

I tcf gu'3/4< Ctw "cpf "Etcwu "Ekewu "
I tcf gu'5/6<" Us wcmf "Engcp "O ci pgw "*****
I tcf gu'7/8< **Eco r "Ego kpi "Uqpp#**

Camp Descriptions



June 17-21

Unleash Your Wild Side, Grades 1-2

Investigate the diversity of the planet as globe-trotting artists! From the arctic to the high desert, revel in the complexities of different ecosystems through creative, hands-on art projects that inspect the science of the most intricate environments of the globe. Leave no rock unturned as students report back on the unique aspects of the places and creatures they encounter that day. Campers will cultivate art and language skills, promote global awareness and spark a love for STEAM as they work alongside the flora, fauna, wild beasts and incredible cultures of the Earth!

Digital Relay Challenge, Grades 3-4

Millennium Mines needs help communicating its recent discovery. Campers design, build, test and redesign a code transmission system.

Intermediate Robotics, Grades 4-5

Campers will design, build and program their own LEGO MINDSTORM NXT robot. The camp will focus on the elements of design and testing participant's ideas and redesigning their robots until it meets the highest standards. We will also focus on presentation skills as campers show off their robots and demonstrate it to all the parents on the last day of camp.

Becoming a STEM Maker, Grades 6-8

Makers are those imaginative individuals who are willing to go out on a limb and create. This course will teach campers how to design and bring their own projects to life with the help of some handy STEM topics and 3D printers. Campers will use and learn concepts revolving around design thinking and engineering. Projects will vary from highflying water rockets to sleek new 3D printed phone cases and anything else in between. Campers are encouraged to bring their own ideas and interests into this camp.

HIGH VELOCITY

Coding Mouse Exploration, Grades 1-2

Students explore the basic needs of animals as they design a code for a programmable mouse to demonstrate their knowledge of everything a mouse needs to survive. Following code, writing code, and debugging code will strengthened their problem-solving skills and their ability to collaborate successfully in a group setting.

The Great Toy Challenge, Grades 3-4

Sir Isaac's Toy Company wants to create a smushy, gooshy children's toy and needs help in design testing. Campers identify materials based on their properties, evaluate competitors' products and design a superior product to sell.

Learn to Code with Minecraft, Grades 6-8

There's a new animal in town: TURTLES! Yes, turtles. In this Minecraft mod (ComputerCraftEdu) there exist powerful, but clueless, turtle robots. Students will learn the fundamentals of programming through a tile-based interface. It's a fun and new twist on Minecraft and computer programming.

Advanced Robotics, Grades 6-8

You will put their creative engineering skills to the test as you work to complete building, navigation and programming missions with your NXT Mindstorm robots. In addition to the many individual challenges, campers may choose to compete with each other to build the fastest and strongest robots in the daily head-to-head competitions. Campers will also get the opportunity to meet robotics competition teams. If you already know the basics of designing, building and programming, then this camp will be a great place to work with other young robotic engineers in a fun, friendly and competitive atmosphere.



In Competitive Robotics you will put your creative engineering skills to the test as you work to complete, navigation and programming missions with Lego EV3 robots. In addition to the many individual challenges, campers may choose to compete with each other to build the fastest and strongest robot.

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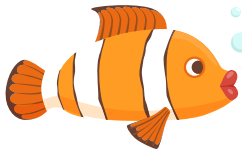
In this camp students, will explore ways to pollinate plants in a greenhouse by creating a model plant pollinator. This camp is a hands-on camp which is designed for group activities. Activities will be fun, challenging and allow students to work in a team environment.

In this camp students will explore energy conversion and will design a passive solar house based on criteria and constraints. This is a hands-on camp that will challenge students and create a fun and exciting learning environment.

The city of lakeside needs to learn how pollution moves and how to keep it from flowing into the lake. Campers will design, build and test a model of subsurface flow for a rain garden.

In Competitive Robotics, you will put your creative engineering skills to the test as you work to complete building, navigation and programming missions with your Lego EV3 robots. In addition to the many individual challenges, campers may choose to compete with each other to build the fastest and strongest robots in the daily head-to-head competitions. If you already know the basics to designing, building and programming, then this camp will be a great place to work with other young robotic engineers in a fun, friendly and competitive atmosphere.

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Camp Descriptions

HIGH VELOCITY

Farmer Grady's Challenge, Grades 1-2

How can a farmer protect crops when a hailstorm threatens? Campers save the day using criteria and constraints to determine which design solutions can help Farmer Grady protect his crops. They will learn about weather related hazards and how to make a claim about the merit of a design solution

Squeaky Clean Magnets Challenge, Grades 3-4

Pete, the owner of Pete's Pet Shop, is looking for a way to quickly clean fish tanks without disturbing the fish. Students explore the power of magnets, and they combine their best ideas as a team to make, test and redesign a prototype solution for Pete.

Notes:

Grades 6-7: **Camp Coming Soon!**

Grades 6-8: **Camp Coming Soon!**

July 8-12

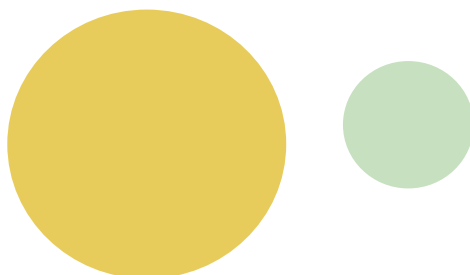
Bug Camp, Grades 1-2

This is an active camp that will combine outdoor exploration, recreation and hands-on activities for our young campers. Throughout the week campers will discover how amazing and valuable bugs truly are. They will collect insects, perform experiments and activities with the insects and more. Collecting trips are interspersed with a series of fun projects and activities. This is the perfect camp for bug lovers and enthusiasts!

Science of the Human Body, Grades 3-4

Take a closer look at the microscopic mechanisms that make humans tick! Each unit of this awesome 5-day camp examines the complexities of human anatomy and physiology with engaging, fast paced activities. Through learning-by-doing experiences, students begin to unravel the mysteries of the human body by running for a minute to measure heart rate, approximate energy expenditure and discover the importance of refueling with proper nutrition. Maintaining health and fitness is a lifelong endeavor, and Science of the Human Body is the perfect introduction to an eternity of healthy happiness!

Grades 5-6: **Camp Coming Soon!**





Camp Descriptions

July 15-19

Shadow Box Theater, Grades 1-2

In this camp students will explore light and shadows by planning, resting, and redesigning scenery for a shadow box theater. Students will engage in hands-on activities that will challenge them and allow for creativity.

The World of Bugs, Grades 3-4

This is an active camp that will combine outdoor exploration, recreation and hands-on activities for our young campers. Throughout the week campers will discover how amazing and valuable bugs truly are. They will collect insects, perform experiments and activities with the insects and more. Collecting trips are interspersed with a series of fun projects and activities. This is the perfect camp for bug lovers and enthusiasts!

Science of the Human Body, Grades 3-4

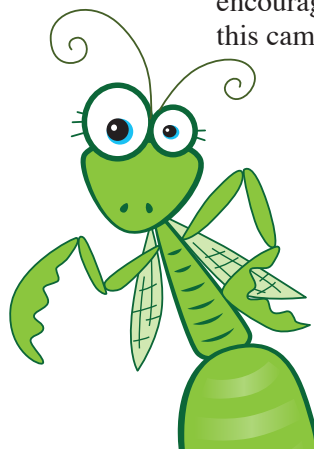
Take a closer look at the microscopic mechanisms that make humans tick! Each unit of this awesome 5-day camp examines the complexities of human anatomy and physiology with engaging, fast paced activities. Through learning-by-doing experiences, students begin to unravel the mysteries of the human body by running for a minute to measure heart rate, approximate energy expenditure and discover the importance of refueling with proper nutrition. Maintaining health and fitness is a lifelong endeavor, and Science of the Human Body is the perfect introduction to an eternity of healthy happiness!

Game Design, Grades 5-6

In this course, students will learn basic video game coding concepts by making different types of games, including racing, platform, launching, quest, and many more. By the end of the course, students will have learned the language of block coding and how to use it to create anything they can imagine.

Becoming a STEM Maker, Grades 6-8

Makers are those imaginative individuals who are willing to go out on a limb and create. This course will teach campers how to design and bring their own projects to life with the help of some handy STEM topics and 3D printers. Campers will use and learn concepts revolving around design thinking and engineering. Projects will vary from highflying water rockets to sleek new 3D printed phone cases and anything else in between. Campers are encouraged to bring their own ideas and interests into this camp.



HIGH VELOCITY

Helicopter Hang Time, Grades 1-2

Faster is usually better, but with Helicopter Hang Time Exploration, landing slowly is the key. Campers learn about fair tests to evaluate the strengths and weaknesses of different designs of reusable paper helicopters. Then, as a team, campers design, build and test their own helicopters to land even slower.

Exploration in the World of Art, Grades 3-4

In this camp students will create artwork and crafts using different materials, colors, textures, and patterns that showcase creative art forms from different artists and themselves.

Notes:

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are approximately 20 lines visible. The paper has a slight shadow on its right side, suggesting it's resting on a surface.

Grades 5-6: Camp Coming Soon!

Grades 5-6: Camp Coming Soon!

July 22-26

STEM Make-It Take-It, Grades 1-2

Campers will be participating in STEM design challenges, and will be able to take each project home daily. They will be designing and creating balloon cars, air blasters, spinning toys, and more!

The World of Bugs, Grades 3-4

This is an active camp that will combine outdoor exploration, recreation and hands-on activities for our young campers. Throughout the week campers will discover how amazing and valuable bugs truly are. They will collect insects, perform experiments and activities with the insects and more. Collecting trips are interspersed with a series of fun projects and activities. This is the perfect camp for bug lovers and enthusiasts!

Grades 5-6: Camp Coming Soon!

Grades 5-6: Camp Coming Soon!

Camp Descriptions



HIGH VELOCITY

Exploration In the World of Art, Grades 1-2

In this camp students will create artwork and crafts using different materials, colors, textures, and patterns that showcase creative art forms from different artists and themselves.

Notes:

This image shows a full page of blank handwriting practice paper. It features approximately 28 evenly spaced horizontal blue lines across the entire page, providing a guide for letter height and placement. The lines are consistent in color and thickness throughout.

Wildlife Corridors Challenge, Grades 3-4

The Department of Roads needs help designing the animal corridor to safely move wildlife across the road. Students plan, build, and test the success of wildlife corridors under a busy road.

Grades 5-6: Camp Coming Soon!

Grades 7-8: Camp Coming Soon!

July 30 – August 3

Farmer Grady's Challenge, Grades 1-2

Campers will be participating in STEM design challenges, and will be able to take each project home daily. They will be designing and creating balloon cars, air blasters, spinning toys, and more!

The World of Bugs, Grades 1-2

This is an active camp that will combine outdoor exploration, recreation and hands-on activities for our young campers. Throughout the week campers will discover how amazing and valuable bugs truly are. They will collect insects, perform experiments and activities with the insects and more. Collecting trips are interspersed with a series of fun projects and activities. This is the perfect camp for bug lovers and enthusiasts!

Competitive Robotics, Grades 6-8

In Competitive Robotics you will put your creative engineering skills to the test as you work to complete building, navigation and programming missions with your Lego EV3 robots. In addition to the many individual challenges, campers may choose to compete with each other to build the fastest and strongest robots in the daily head-to-head competitions. If you already know the basics to designing, building and programming, then this camp will be a great place to work with other young robotic engineers in a fun, friendly and competitive atmosphere.

Grades 6-8: Camp Coming Soon!

HIGH VELOCITY

Arts and Crafts Circus, Grades 1-2

During this week of camp, you will design, build and program your own WeDO 2.0. We will focus on the elements of design, testing your ideas and redesigning your robot until it meets your high standards. We will also have other engineering and design challenges throughout the week. Even if you have no previous skills building or programming robots you will be able to have a robot up and running the very first day.

Squeaky Clean Magnets, Grades 3-4

Pete, the owner of Pete's Pet Shop, is looking for a way to quickly clean fish tanks without disturbing the fish. Students explore the power of magnets, and they combine their best ideas as a team to make, test and redesign a prototype solution for Pete.

Grades 5-6: Camp Coming Soon!



Our Amazing Camp Instructors

We are pleased to share that all of our instructors are credentialed teachers with extensive experience in their respective STEM subject area. Each camp of 25 campers will also have a counselor. Our dynamic and caring counselors are all UC Davis students. Our staff works hard to make sure everyone has a very fun and educational experience!

Additional Services

In order to accommodate everyone's busy schedule, we will offer extended care both before and after the regular camp day. Here's what we offer:

7:30 – 8:30 a.m. – Early Drop Off, \$25 per week
2:00 – 6:00 p.m. – Extended Day, \$75 per week

For campers enrolled in High Velocity camps, they will be supervised from 2-2:30 p.m. and again from 5:30-6 p.m. There is no extra cost for this additional time.

Register early and save!

