SUMMER 2018 UNIVERSITY FOR KIDS
a unique enrichment program for grades 4-9

Session 1: June 11–15
Session 2: June 18–22
Session 3: June 25-29
Session 4: July 9-13
Session 5: July 16-20
Session 6: July 23-27
**EXCEL FOR YOUTH** is a unique academic enrichment program that offers students entering grades 4-9 (in the fall of 2018) accelerated classes in science, technology, engineering, math, visual art, drama, and writing. EXCEL celebrates its 36th year and has served over 24,000 students since 1982.

One-week, half day and all day classes take place on the campus of Sonoma State University and use the school’s specialized arts, science, and technology labs, as well as providing guest speakers and field trips. Exceptional mentor teachers include university faculty, professionals from specialized fields, and teachers from area districts who design classes to capitalize on each student’s interest, creativity, and curiosity.

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**Important Information**

**FEES:**
Classes range from $190-$205 for a morning or afternoon one-week class, and $390-$425 for a one-week ALL day class.

**DISCOUNTS:**
We offer discounts for families with more than one child enrolled in our program this summer. The discount is 5% off each child's registration fees.

**EXCEL TENT LOCATION:**
In the northwest corner of the SSU campus. Park in marked EXCEL parking spaces in Parking Lot A. Walk and sign in student at the tent located across from Rachel Carson Hall, Rooms 68 and 69. (see map, page 31)

**DROP OFF and PICK UP:**
Due to safety concerns ALL EXCEL students must be signed in and out at the EXCEL tent daily by either a parent or designated adult (special release forms available on the EXCEL website). IF staying for lunch bunch students are required to check-in at the tent with the lunch supervisor.

**PARKING:**
Please park in the marked space in Parking Lot A. Your student confirmation packet will include a 15-minute drop off and pick up parking pass, which can also be used for Open Houses on Fridays.

**REFUNDS:**
A $25 nonrefundable processing fee is deducted for each class dropped up until 2 weeks prior to class start. NO refunds are given if canceling within 2 weeks of the first day of class.
LUNCH BUNCH:
As a service for EXCEL students, there will be lunch supervision provided at no charge from 12:15-1:00pm for those enrolled in both morning and afternoon classes, in the grassy area near the EXCEL tent and Rachel Carson Hall.

At lunch time, students are required to check-in with the lunch supervisor first thing everyday. Students must stay within the Lunch Bunch area. Please have students bring a sack lunch and a snack from home. Students will not be permitted to leave the supervised area and buy food elsewhere on campus. Parents may take students away for lunch by signing out their child with the Lunch Bunch supervisor. Please feel free to send a game for students to share or a book to read.

FORMS:
Applicable forms must be completed and returned to the class instructor on the first day of classes. You can find the following forms online at http://www.sonoma.edu/exed/excel/-guidelines-are-mailed-home
• Medical History Form
• Internet Access Form
• Fieldtrip Forms – One for each applicable class.
• Special Release Form – Use only if child bikes, buses, or walks home or to an SSU office.

ABSENCES:
Parents must call the office before class begins if a student is going to be absent. The phone number is 707-664-2645 (voicemail available).

FIELD TRIPS:
Certain classes take trips off campus to enhance learning. Parents are needed to drive to these locations. Parent volunteer drivers need to register with the School of Extended and International Education office in Stevenson 1012 prior to class start up, and need to show license and proof of insurance.

T-SHIRTS:
Each EXCEL student will receive one t-shirt per year.

OPEN HOUSE:
Most of our classes put on an open house the last half hour of the last class; drama class open houses are usually longer. Please check with each teacher for details; times vary.

REGISTER @ SONOMA.EDU/EXED/EXCEL
SESSION 1

MORNINGS 9:00AM-12:15PM
Birds - Art - Life (5th-9th)
Crash & Burn Chemistry A.M. (4th-6th)
Kids Biz: How to Run a Success Business (4th-9th)
The Art of Storytelling: Pixar in a Box (5th-8th)
Pottery Wheel Workshop (6th-9th)
Tinkering Studio w/ littleBits® (4th-6th)
Way with Words: Creative Writing Workshop (6th-9th)
Wood Shop for Kids AM (4th-6th)

AFTERNOONS 1:00-4:00PM
Crash & Burn Chemistry P.M. (4th-6th)
Exploring Animal Careers (4th-9th)
Just Write! Creative Writing for Kids (4th-6th)
Summer Clay Studio (4th-9th)
The Air We Breathe! Kids Making Sense of Air Quality (6th-9th)
The Art of Arguing (6th-9th)
Wood Shop for Kids PM (5th-8th)

SESSION 2

MORNINGS 9:00AM-12:15PM
Coding Games with Scratch (4th-6th)
CSI: Sonoma (6th-9th)
Dr. Seuss Meets Romeo & Juliet: A Short Rom-Com Drama (5th-9th)
Fashion Design AM (4th-6th)
Out of the Box! Cardboard Engineering (4th-6th)
Pottery Studio (4th-9th)
Pre-Med for Kids (4th-9th)
The Science of Science Fiction (5th-8th)

AFTERNOONS 1:00-4:00PM
Cabinet of Curiosities (5th-8th)
Fashion Design PM (6th-9th)
Oceanology (4th-6th)
Out of this World: Astronomy 101 (4th-6th)
Screen Printing and Design (5th-8th)
The Lion King: A Mini-Musical (4th-9th)
How to Write a Graphic Novel (5th-9th)

SESSION 3

ALL DAY CLASSES 9:00AM-4:00PM
Hogwarts @ SSU (4th-8th)
Go-Kart Builders (5th-8th)
Sculpted Canvas Art (4th-9th)

June 11-15

June 18-22

June 25-29
SESSION 4

MORNINGS 9:00AM-12:15PM
Acting Out! Improv Studio (4th-8th)
Adventures in Lego Robotics (4th-6th)
Graphic Design Boot Camp (6th-9th)
Investing In Your Future (6th-9th)
KaZap! Physics for Supervillains (6th-9th)
The aMAZEing Escape Room (5th-8th)
Tut, Tut: Adventures in Ancient Egypt (4th-6th)
World of Wearable Art (4th-6th)

AFTERNOONS 1:00-4:00PM
3D Modeling & Design with Maya® (6th-9th)
10 Ways to Survive the Zombie Apocalypse: A Short Comedic Play (5th-9th)
Coding Games with Scratch (4th-6th)
Crime Busters (4th-6th)
Kitchen Chemistry (4th-6th)
Makerspace @ SSU (5th-8th)
Paint Like the Masters (5th-9th)

SESSION 5

MORNINGS 9:00AM-12:15PM
Archaeology in Action: Artifact Lab (6th-9th)
Digital Photography AM (4th-6th)
Dream Tree House Design (4th-7th)
Kid’s Court: Making Your Case (6th-9th)
Micro:bits (5th-8th)
Brain Games: Neuroscience for Kids (4th-6th)
Stop Motion Animation (5th-9th)
The World Around Us: Fine Arts Lab A.M. (4th-6th)

AFTERNOONS 1:00-4:00PM
Age of the Dinosaurs (4th-8th)
Digital Photography PM (6th-9th)
History’s Mysteries (4th-6th)
It’s Sew Electric (5th-8th)
Makerspace @ SSU (4th-6th)
Programming with Python (5th-9th)
The World Around Us: Fine Arts Lab P.M. (6th-9th)

SESSION 6

ALL DAY CLASS 9:00AM-4:00PM
The Wizarding World of J.K. Rowling (4th-9th)
BIRDS — ART — LIFE (Grades 5-9)
Few creatures symbolize the beauty of the natural world better than birds. Their delicacy, poise, and power combine to create an irresistible subject for the artist. Why do birds have different kinds of beaks, claws, songs, or nests? How do they interact with their unique environment? Examine the anatomy, habitat, and physical features of birds from falcons to hummingbirds. Log your observations into journals, drawings, and 3D sculpture. Parent drivers are needed for a field trip to the Bird Rescue Center in Santa Rosa.

KRISTA ANANDAKUTTAN can be found at the intersection of art and science, walking with pockets full of found treasures, or peering into a microscope. She calls on her background in fine art, science (ecology and evolutionary biology), and science illustration every day. Her artwork is utilized by researchers, environmental preserves, science journals, and other publications; and shown in community locations such as natural history museums, libraries, art galleries, and public open studio events.

CRASH AND BURN CHEMISTRY A.M. (Grades 4-6)
Did you know that everything on earth (and in the universe) is made up of chemicals? “Crash and Burn Chemistry” is an introduction to chemical reactions that form solids, change colors, smoke, bang, whiz, flash, and glow in the dark. Come and explore the nature and mystery of chemicals and how they affect us and our environment. Identify an unknown chemical spill. Build a smoking machine that actually shows what happens when a person smokes a cigarette. Carry out your own experiments to identify the nature of chemicals. Then take the experiments home to amuse and amaze your friends and family. Last, but not least, join us to uncover the secret of the “glow in the dark pickle.”

JENNIFER ZACKS, B.A., in Environmental Studies, has taught full time for the Cotati - Rohnert Park Unified School District for the past twelve years.

KIDS BIZ: HOW TO CREATE A SUCCESSFUL BUSINESS (Grades 4-9)
Bill Gates, Oprah Winfrey, and Mark Zuckerberg all started off as kids who were interested in being their own boss and seeing their creative ideas become a reality. Learn what you need to start a successful business. Work in collaborative teams to learn, step-by-step, how to create a business, using creative approaches to meeting customers’ needs. Meet successful entrepreneurs who started their own businesses, and have an exclusive visit to a premier business start up in the North Bay. Discover many of the secrets to developing a business that is successful and ethical, and that provides customers with a good product or service at a fair price. Utilize your critical thinking skills and creativity as you explore the exciting world of entrepreneurism! Parent drivers are needed for a field trip.

MICHAEL FANNING, M.A., Ed.D, an experienced teacher and professor who uses engaging project based learning to teach students all subjects, including science and business. He shows students how they can apply their academic knowledge and skills as they prepare for rewarding and interesting careers.
SESSION 1

THE ART OF STORYTELLING: PIXAR IN A BOX® (Grades 5-8)
Explore the storytelling process used at Pixar and create your own Storyreel to share with the Pixar community electronically! Working online, you’ll learn from Pixar directors, story artists, and others all the aspects of storytelling that Pixar uses to create their films. Discover what makes a story great by formulating memorable characters, designing a story structure, including dynamic dialogue, and enhancing your scenes frame-by-frame. Use storyboards to pitch your story to your fellow classmates, apply their feedback to your story, add music and sound effects, and present your final Storyreel at Friday’s showcase!

LINDSAY HUNTER has over 12 years of teaching experience through the RVUSD in Santa Rosa. She has also taught post-secondary for FIDM. Using threads from across disciplines and keeping students curious, creative, and engaged is her priority.

JUNE 11-15 | 9:00am - 12:15pm | #1023 | $190

POTTERY WHEEL WORKSHOP (Grades 6-9)
Let’s throw pots! Have you been dying to try the pottery wheel? We will focus our week on the challenging skill of throwing on the wheel. You’ll be guided step-by-step through the basics of wheel throwing, and create one-of-a-kind masterpieces using both the wheel and hand building techniques. We’ll throw cups, bowls, vases, and more, and then personalize our creations with an assortment of decoration techniques. Due to the challenging nature of learning to throw, it is recommended that students have some previous experience with the wheel. Space is limited. Please bring an old towel and wear clothing that can get messy!

LAUREL BEGLEY is a professional ceramic artist and teacher who divides her time equally between teaching and making. She has taught children and adults at many clay studios and schools around Sonoma County, including the Sebastopol Center for the Arts. Laurel is currently the owner and curator of Side Street Gallery in Windsor.

JUNE 11-15 | 9:00am - 12:15pm | #1024 | $205

TINKERING STUDIO WITH LITTLEBITS® (Grades 4-6)
Play! Create! Invent! Interested in electronics and how they work? Spend a week discovering the many ways to experiment and engineer with electronic building blocks! Each color-coded littleBits® piece has a specific function (ie. motion, lights, sound, sensors, internet connectivity), and all the Bits snap together with magnets to make larger circuits. Building circuits has never been so fun! Design and create powerful, advanced electronics in a matter of seconds. Come build amazing things with us!

DINA MCCARTHY teaches Science and History at RVCS Matanzas Middle School in Santa Rosa. She has a strong background in a variety of elementary education endeavors. Dina is passionate about teaching and loves to help students develop an appreciation for learning.

JUNE 11-15 | 9:00am - 12:15pm | #1025 | $190
WAY WITH WORDS: CREATIVE WRITING WORKSHOP (Grades 6-9)
Do you like to make up stories or create compelling characters? Explore poetry, short stories, scripts, and many other types of writing through a variety of entertaining individual and group writing activities. Plot a story by creating believable characters, and then get them into (and out of) trouble. Write about the same incident from multiple points of view, and rewrite a fairy tale by changing the setting. Create a script with a partner by solving a problem entirely in dialog. Let your imagination soar and your pen go wild! At the end of the class you’ll take home a collection of writing, as well as new ideas and techniques to keep you writing all year long.

LISA SHULMAN is the author of several picture books, including Old MacDonald had a Woodshop, the Matzo Ball Boy, and the Moon Might Be Milk. She has written a middle school novel as well as dozens of children’s books for the educational market. Her poetry, fiction and nonfiction for adults have appeared in various journals. As a visiting author, Lisa has spoken to hundreds of students about writing. Lisa has taught creative writing for children and teens all around Sonoma County and currently teaches at Apple Blossom School in Sebastopol.

WOODSHOP FOR KIDS A.M. (Grades: 4-6)
Wham, bang, hammer and saw. Here’s your chance to experience a real woodshop and discover skills that will last you a lifetime. Build great-looking projects out of wood that have real value. Use new wood, weathered wood, scrap wood, round and flat wood and transform it into a sturdy tool box, a charming bird house, and other things that will be used every day. Learn to safely operate a variety of hand tools including hammers, saws, screwdrivers, vices, planes, and drills, and observe a demonstration of the big power tools in the SSU Woodshop. Understand the creative process of construction as you design and plan your project, join the parts together, and then finish it. Walk away with some terrific projects and an “I can build it” attitude.

MIKE MCGUIRE, M.A. in Education from St. Mary’s College, has been a teacher for over 34 years, was Santa Rosa Chamber of Commerce Elementary Teacher of the Year and a mentor teacher for Santa Rosa School District. He has served as a teacher and principal at Hidden Valley School. He has had a career-long interest in teaching science to elementary and middle school students.
CRASH AND BURN CHEMISTRY P.M. (Grades 4-6)
Did you know that everything on earth (and in the universe) is made up of chemicals? “Crash and Burn Chemistry” is an introduction to chemical reactions that form solids, change colors, smoke, bang, whiz, flash, and glow in the dark. Come and explore the nature and mystery of chemicals and how they affect us and our environment. Identify an unknown chemical spill. Build a smoking machine that actually shows what happens when a person smokes a cigarette. Carry out your own experiments to identify the nature of chemicals. Then take the experiments home to amuse and amaze your friends and family. Last, but not least, join us to uncover the secret of the “glow in the dark pickle.”

JENNIFER ZACKS (see bio on page 6)
JUNE 11-15 | 1-4pm | #1028 | $190

EXPLORING ANIMAL CAREERS (Grades 4-9)
Get in touch with your inner Dr. Doolittle or Jane Goodall! Have you thought about working with animals as a career? Animal career paths are as vast as the animal kingdom itself. Career fields include Medicine/Veterinary, Animal Rescue, Wildlife Rehabilitation, Animal Trainer, Habitat Specialist, Zoologist, and Animal Caretakers. Explore some of the exciting options available in careers that involve animals with guest speakers and field trips.

DINA MCCARTHY (see bio on page 7)
JUNE 11-15 | 1-4pm | #1029 | $190

JUST WRITE! CREATIVE WRITING FOR KIDS (Grades: 4-6)
Do you like to make up silly stories, create compelling characters, or play with poetry? Explore poetry, short stories, scripts, and many other types of writing through a variety of entertaining individual and group writing activities. Plot a story by creating believable characters, and then get them into (and out of) trouble. Write about the same incident from multiple points of view and rewrite a fairy tale by changing the setting. Create a script with a partner by solving a problem entirely in dialog. Write from the point of view of a shoe or a cell phone, and use sensory details to make a lie as believable as the truth. Let your imagination soar and your pen go wild! At the end of the class you’ll take home a class collection of writing to read and enjoy.

LISA SHULMAN (see bio on page 8)
JUNE 11-15 | 1-4pm | #1030 | $190
SUMMER CLAY STUDIO (Grades: 4-9)
Come explore the world of clay and spend a miraculous week rolling, pinching, pounding, and wedging clay into all sorts of shapes and forms. Explore a variety of hand building techniques and invent fanciful sculptural and functional pieces. Embellish the surface of your masterpieces with texture and special decorative stamps and perfect the techniques of glazing and underglazing. Be a part of a Raku firing at the end of the session.
Please bring an apron or old clothes and a towel or two for clean-up. Due to time restraints, some pieces will not be fired by the end of class. Please plan to pick up additional pieces the following week.
LAUREL BEGLEY (see bio on page 7)
JUNE 11-15 | 1-4pm | #1031 | $205

THE AIR WE BREATHE: KIDS MAKING SENSE OF AIR QUALITY (Grades 6-9)
Air pollution is harming millions of people around the world, shortening lives, and taking a toll on our ecosystem. Cities in India, China, and even the U.S. frequently exceed air quality standards, and soaring pollution levels put people at risk. Unravel fact from fiction in terms of what is bad in the air. Explore what it means to have a “spare the air” day by using air beam monitors to do some citizen science testing for particulates. Collect samples while walking around the Sonoma State University campus, then upload your data and draw some conclusions. Explore the process of experimental design, and learn how to measure your lung capacity. This class provides hand held air quality sensors and mobile phones specifically designed for use with this curriculum.
LEE C BOYES, B.A. in Chemistry and M.A. in Education, is a teacher at Petaluma High for the past 22 years teaching honors chemistry. She has also worked in environmental chemistry labs for 6 years.
JUNE 11-15 | 1-4pm | #1032 | $190

REGISTER @ SONOMA.EDU/EXED/EXCEL
**THE ART OF ARGUING (Grades: 6-9)**

“Why is homework necessary?” “Why do we have assigned seats?” “Why can’t we talk?” “Why can’t we tattoo our bodies using board markers?” “Why?” “Why?” “Why?” People are naturally inquisitive and sometimes quite spirited “know-it-alls.” Use your natural talent of arguing and challenging authority to voice your opinions freely and dynamically. Debating enables you to express yourself, think strategically and persuade others. Great debaters select a topic and take a stand, research and gather facts, pick a moderator, ensure both sides take part, design opening and closing statements and reflect on what happened. Working cooperatively, brainstorm ideas and increase your understanding of other’s views. Strengthen your self-confidence and prepare yourself for leadership in the real world.

**REBECCA YOUNG** has worked in the educational field for over 10 years. She has a B.A. from SSU and a M.A. from Indiana University in Student Affairs and Higher Education. At SSU she teaches course for incoming freshmen. Her background includes providing summer programming for youth. Rebecca feels that learning should be fun and full of active engagement. She emphasizes that each student is unique and encourages them to bring their voice, and creativity to all situations.

**WOODSHOP FOR KIDS P.M. (Grades: 5-8)**

Wham, bang, hammer and saw. Here’s your chance to experience a real woodshop and discover skills that will last you a lifetime. Build great-looking projects out of wood that have real value. Use new wood, weathered wood, scrap wood, round and flat wood and transform it into a sturdy toolbox, a charming birdhouse, and other things that will be used every day. Learn to safely operate a variety of hand tools including hammers, saws, screwdrivers, vices, planes, and drills, and observe a demonstration of the big power tools in the SSU Wood Shop. Understand the creative process of construction as you design and plan your project, join the parts together, and then finish it. Walk away with some terrific projects and an “I can build it” attitude.

**MIKE MCGUIRE** (see bio on page 8)

**SESSION 1**  
June 11-15  
1:00-4:00pm

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**WOODSHOP FOR KIDS P.M.**  
**JUNE 11-15 | 1-4pm | #1034 | $205**

**JUNE 11-15 | 1-4pm | #1033 | $190**
CODING GAMES WITH SCRATCH (Grades 4-6)
This multimedia adventure is the perfect course for aspiring coders. Create animated stories and games while learning programming concepts with Scratch. With this drag-and-drop platform developed by MIT, learn the essential building blocks behind object-oriented programming through creating fun, interactive stories, animations, and games. Let your imagination run wild and think creatively, and learn to share your creations on the web. Take home a copy of your own game at the end of this class. It could be the start of something BIG! KRISTINE WARREN has been a lover of books and the worlds they unfold since childhood. She helps students develop a love of learning with enthusiasm and excitement, whether it be discovering an exciting book, understanding a scientific idea, or delving deeper into new interests. She has been an elementary school teacher for 8 years and currently teaches 5th grade in Santa Rosa.

JUNE 18-22 | 9:00am - 12:15pm | #1035 | $190

CSI: SONOMA (Grades 6-9)
When bones turn up, who are you going to call? CSI SONOMA! Learn about the human skeleton and how to implement forensic methods to help identify missing persons from skeletonized remains. Working in teams, gather evidence and take it back to the lab to create a crime scene profile and help make a positive I.D. of the deceased individual. We will only use plastic cast bones and no graphic photos of crime scenes will be shown. However, we will discuss potentially disturbing issues such as homicide and the human decomposition process. WHITNEY MCCLELLAN, M.A., is an archaeological specialist at the Anthropological Studies Center (ASC) at SSU. Whitney frequently gives lectures about human osteology and zooarchaeology to graduate and undergraduate level classes at SSU. She also co-teaches the ASC’s faunal internship as well as guides tours for elementary school age children at the ASC on campus.

JUNE 18-22 | 9:00am - 12:15pm | #1036 | $190

DR. SEUSS MEETS ROMEO AND JULIET: A SHORT ROM-COM DRAMA (Grades 5-9)
A whimsical reinvention of Shakespeare’s tragic love story, complete with rhymed couplets, creative wordplay, and fantastical creations - similar to something Dr. Seuss might have come up with if he ever had his way with the script. There is, of course, a twist ending that is very Dr. Seuss so be prepared to have some fun with meter, rhythm, and rhyme as you act your way through this fantastical production!

RAYMOND SKIPP is a graduate of the Royal Academy of Dramatic Art in London, England. He currently teaches drama in many local schools. Besides performing in both film and television, he has an extensive Shakespearean background.

JUNE 18-22 | 9:00am - 12:15pm | #1037 | $190
FASHION DESIGN A.M. (Grades 4-6)
Lights, music, runway, action! That’s how we finish our week of creativity and fashion. Dive into the history of fashion from the 1920’s to the present. Study designs classic to each decade and develop a strong foundation in a broad array of design options. Learn to sketch an outfit and then manifest your design in a final fashion show. Select fabric, cut, pin and sew (hand and machine) your very own creations. Collaborate with other students to create unique one of a kind designs with fun accessories. Students contribute in many ways to the final “Show” as models, dressers, text writers, researchers, announcers, and coordinators.

KATHRYN HENDERSON has been teaching youth art camps and classes in Sonoma County for the past 20 years. Drawing on her degree in design and fine art, she offers students a broad spectrum of the arts. She has an extensive collection of vintage clothing and jewelry, which she uses in her classroom presentations.

JUNE 18-22 | 9:00am - 12:15pm | #1038 | $190

OUT OF THE BOX! CARDBOARD ENGINEERING (Grades 4-6)
Engage your creativity and inner engineer as you construct 3D objects. Choose from a range of designs including games, working models, and decorative items to build from upcycled cardboard. Learn a range of techniques, from bending and shaping cardboard, making joins, and creating parts that move (such as pulleys, wheels, and levers), and harness the unique qualities of cardboard. Build something brilliant with Out of the Box — the possibilities are endless!

HELEN BRADLEY is an artist and trainer who divides her time between the real and digital worlds, picking the best from both. Helen teaches Adobe Illustrator, Adobe Photoshop, Adobe Lightroom and digital photography both in person and online to students worldwide. She has written four books on photo crafts and she currently produces online video training for graphic designers and photographers at Skillshare.com and for a number of blogs and other online sites. Helen brings to her training a desire to help students learn in a fun and practical way and she specializes in simplifying complex concepts so they can be easily understood.

JUNE 18-22 | 9:00am - 12:15pm | #1039 | $190

REGISTER @ SONOMA.EDU/EXED/EXCEL
POTTERY STUDIO (Grades 4-9)
Have you ever wanted to create your own usable plates, vases, bowls, cups and more? Focus on mastering the four hand-building techniques for making your own unique earthenware. Pinch, coil, extrude, and slab build beautiful and creative pieces that can be used daily. Explore ways to decorate your pieces with texture, carving, and colorful underglazes and glazes. Please bring a towel and your imagination. Due to time restraints, some pieces may not be fired by the end of class. Please plan to pick up additional pieces the following week.
LAUREL BEGLEY (see bio on page 7)  JUNE 18-22  |  9:00am - 12:15pm  |  #1040  |  $205

PRE-MED FOR KIDS (Grades 4-9)
Would you like to be a doctor, nurse, dentist, veterinarian or physical therapist? If you have ever thought about a future career as a health professional, come discover what these careers are about and what it takes to prepare for them. In this exciting hands-on class, you’ll study human anatomy, how to handle an emergency and witness a dissection. Activities include a physician led tour of a health clinic, a fascinating behind-the-scenes visit at a hospital (including areas that are usually off-limits), interesting guest speakers who are health care practitioners, and engaging activities. Parent drivers are needed for a field trip to Sutter Hospital - Santa Rosa.
MICHAEL FANNING (see bio on page 6)  JUNE 18-22  |  9:00am - 12:15pm  |  #1041  |  $190

THE SCIENCE OF SCIENCE FICTION (Grades 5-8)
The stories of sci-fi may be fiction, but in many cases, the science is real. Alien life forms, artificial intelligence, time travel...is there any truth in these exciting ideas? Explore the science behind classic and modern science fiction stories and movies like *Star Wars*, *Star Trek*, and *Jurassic Park*, whose plots, settings, and technology could exist only in the far distant future. But as science advances and new discoveries are made, fantastical sci-fi technologies might be closer to reality than one may think. Journey to Mars, unravel the mysteries of black holes and worm holes, and visit the future with cutting-edge robotics and innovative technology. Journey to the place where science and fiction converge.
MELISSA KILBER is a middle school science and math teacher for the Rincon Valley Unified School District in Santa Rosa. She is also the coach for the Science Challenge team and leads a STEM club. Prior to becoming a middle school teacher 5 years ago, Melissa ran children’s summer camps for 5 years.
JUNE 18-22  |  9:00am - 12:15pm  |  #1042  |  $190
CABINET OF CURIOSITIES (Grades 5-8)
Do you have a keen interest in science and/or history? Are you a collector? Do you like visiting museums? Cabinets of curiosities, also known as "wonder rooms," were small collections of extraordinary objects which led to the concept of today’s museums. Create your own cabinet of curiosities and hold an exhibit for family and friends. Begin by taking a closer look at a variety of museums and exhibits as well as the classification process. Then select a theme of your choosing to gather information, items, and images, and catalog and label each specimen to complete your portable collection. Share your wonder and curiosity with others! Students will view several special collections on the SSU campus for inspiration.

REBECCA YOUNG (see bio on page 11)
JUNE 18-22 | 1-4pm | #1043 | $190

FASHION DESIGN P.M. (Grades 6-9)
Lights, music, runway, action! That’s how we finish our week of creativity and fashion. Dive into the history of fashion from the 1920’s to the present. Study designs classic to each decade and develop a strong foundation in a broad array of design options. Learn to sketch an outfit and then manifest your design in a final fashion show. Select fabric, cut, pin and sew (hand and machine) your very own creations. Collaborate with other students to create unique one of a kind designs with fun accessories. Students contribute in many ways to the final “Show” as models, dressers, text writers, researchers, announcers, and coordinators.

KATHRYN HENDERSON (see bio on page 13)
JUNE 18-22 | 1-4pm | #1044 | $190

OCEANOLOGY (Grades 4-6)
The power and wonder of the ocean is as strong today as ever, with new expeditions to its depths, and new discoveries beneath melting ice, in developing reefs, and on shores around the world. Discover how an octopus eats with Jell-O “stomachs.” Take a Virtual Reality tour of the world’s largest coral reef, visible from outer space, and home to thousands of diverse lifeforms. Find out how underwater volcanoes formed and which creatures lurk in the inky depths of the deepest oceans. All this and more awaits you as you become a junior oceanologist! Parent drivers are needed for a field trip to Bodega Bay.

KRISTINE WARREN (see bio on page 12) JUNE 18-22 | 1-4pm | #1045 | $190
OUT OF THIS WORLD: ASTRONOMY 101 (Grades 4-6)
Blast into outer space as we explore the cosmos. Are you baffled by the Big Bang? Curious about what it’s like to walk on the moon? Wondering if someday you might meet an alien? Dreaming of becoming an astronaut? This fun, interactive class is bursting with all the fascinating information you ever wanted to know about space. The week would not be complete without a discussion about black holes, and of course—are we alone? Is there of life on other planets? Includes a field trip to the SRJC Planetarium.

MELISSA KILBER (see bio on page 14) JUNE 18-22 | 1-4pm | #1046 | $190

SCREEN PRINTING AND DESIGN (Grades 5-8)
Want to put your own design on a T-shirt? Would you like to start your own greeting card business? Interested in learning to make fine prints? Learn the ins and outs of screen printing and design by using several methods to screen print your own images on paper and textiles. Reminder: You will use textile inks that do stain clothing, so please bring an apron and dress with this in mind!

LAUREL BEGLEY (see bio on page 7) JUNE 18-22 | 1-4pm | #1047 | $205

LION KING: A MINI-MUSICAL (Grades 4-9)
Disney’s The Lion King has captivated the imagination of audiences around the world and now, you have the opportunity to participate in this one-of-a-kind mini musical. The African savannah comes to life with Simba and Nala, Pumbaa and Timon, Mufasa and Scar, and many more unforgettable characters as they journey from Pride Rock to the jungle and back again in this inspiring, coming-of-age story.

RAYMOND SKIPP (see bio on page 12) JUNE 18-22 | 1-4pm | #1048 | $190

HOW TO WRITE A GRAPHIC NOVEL (Grades 5-9)
Do you like reading graphic novels? Have you ever thought about writing your own? The modern graphic novel has come a long way since your grandfather’s comic books! Writing a Graphic Novel is a workshop designed to get you started on your own graphic novel. First we’ll examine Manga, comics, graphic novels, and picture books for examples of the many different ways to tell a story using illustration and words. Then we’ll go step by step through the process of scripting, storyboarding, pacing, and layout. And finally, you’ll become the director, using cinematic and theatrical techniques to add emotion, drama and humor to your graphic masterpiece. No drawing experience necessary!

MARIE ZORN, B.A. in English teaches 7th grade English at Harvest Middle School in Napa. Marie is the liaison for the Napa Valley Unified ALPS/Gifted and Talented program. She is inspired to support all students reach their full potential. JUNE 18-22 | 1-4pm | #1049 | $190
HOGWARTS @ SSU (Grades: 4-8)
Hogwarts has a satellite campus at Sonoma State University this summer, it seems. Have you ever dreamed that you received a letter welcoming you to Hogwarts? All Harry Potter fans are invited to participate in a wonderful week of wizarding! Once arriving at Hogwarts (Sonoma State University) you will be sorted into houses and given your wizarding class schedule. You’ll attend your Hogwarts classes every day, culminating at the end of the week with a mini Tri-Wizard Tournament, Quidditch matches, O.W.L. exams, and student performances.

Create your own wand in Charms class! In Potions, concoct essence of nightshade and troll slime! Discover your Patronus in Transfiguration, and perfect your dueling skills in Defense Against the Dark Arts! In Care of Magical Creatures, study dragons and other amazing creatures found in Fantastic Beasts and Where to Find Them. In Astronomy, make personal constellations, read your tea leaves in Divination, and make mandrakes in Herbology!

Bring to life the memorable and incredible characters of J.K. Rowling’s Harry Potter books by selecting a scene from your favorite book, creating a script of that scene and having the opportunity to perform that scene with fellow housemates. You and your schoolmates will have many chances to earn points for your houses. Who will win the House Cup?

ELIZABETH HENDRICKSON grew up in a family of scientists and strong readers, and developed a passionate curiosity about the world. Besides her love for science, she has a strong background in drama, building, and the creative arts. She has been an elementary school teacher for 9 years, and is currently teaching 5th grade in Santa Rosa.

RAYMOND SKIPP is a graduate of the Royal Academy of Dramatic Art in London, England. He currently teaches drama in many local schools. Besides performing in both film and television, he has an extensive Shakespearean background.

KRISTINE WARREN has been a lover of books and the worlds they unfold since childhood. She helps students develop a love of learning with enthusiasm and excitement, whether it be discovering an exciting book, understanding a scientific idea, or delving deeper into new interests. She has been an elementary school teacher for 8 years and currently teaches 5th grade in Santa Rosa.

REBECCA YOUNG has worked in the educational field for over 10 years. She has a B.A. from SSU and a M.A. from Indiana University in Student Affairs and Higher Education. At SSU she teaches a course for incoming freshmen. Her background includes providing summer programming for youth. Rebecca feels that learning should be fun and full of active engagement. She emphasizes that each student is unique and encourages them to bring their voice, and creativity to all situations.
GO-KART BUILDERS (Grades 5-8)
Turn a pile of wood, rubber, and steel into a rideable reality as you design your own custom go-kart. Learn how to measure twice and cut once, drill pilot holes, handle a handsaw, and use a rasp and file. In the Sonoma State Wood Shop operate hand and power tools to assemble your kart’s wheels and axles, steering column, hood, and seat. Dream up an inventive design, using acrylic paints to add personalized styling. Debut your kart to your family and friends at Friday’s Open House, then roll home in your one-of-a-kind ride. The price for the class includes an additional $35 materials fee. Space is limited.

MIKE MCGUIRE, M.A. in Education from St. Mary’s College, has been a teacher for 34 years, was Santa Rosa Chamber of Commerce Elementary Teacher of the Year and a mentor teacher for Santa Rosa School District. He has served as a teacher and principal at Hidden Valley School. He has had a career-long interest in teaching science to elementary and middle school students.

JUNE 25-29 | 9am-4pm | #1051 | $425

SCULPTED CANVAS ART (Grades 4-9)
Put your wonderfully imaginative mind to work creating a huge sculpted canvas face. We are talking two foot noses here! Learn to cut and shape wire armatures and canvas into large scale heads. After exploring the anatomy of the face and building its features your way, bring the sculpted canvas to life with color and texture. Then take your sculpture to the next level by painting it to a create dramatic, bold character straight out of your own imagination!

SANDRA ROSE NOVIA, is a professional artist and art instructor. She teaches in both the private and public sectors and has dedicated over two decades to ensuring that children have an enriched education in the arts. She is a Co-Founder of Studio Project, a year-round alternative arts program of unique and innovative art instruction. This is Sandra’s fourth summer teaching for EXCEL at SSU.

JUNE 25-29 | 9am-4pm | #1052 | $390
ACTING OUT! IMPROV STUDIO (Grades 4-8)
In this fast-paced class, the focus is on improv using theater games similar to what you may have seen on Whose Line Is It Anyway? Discover the basics of staging, listening, giving focus, character development, space work, exploring genres, literature, some stage combat, dance, solo and ensemble work. With an arsenal of imaginative games and exercises, think quickly on your feet, build trust with your teammates and unleash your natural creativity and humor. Learn the dos and don’ts of improv, setting up a scene for your co-players, and using your “bag of tricks” while having loads of fun. We end the week with a comedy show for friends and family.
RAYMOND SKIPP (see bio on page 12)  JULY 9-13 | 9am-12:15pm  | #1054  | $190

ADVENTURES IN LEGO ROBOTICS (Grades 4-6)
EV3 Space Challenge dares students to build and program robots that complete a series of missions all set on Mars! Using LEGO’s® most advanced and newest robotics technology – the powerful MINDSTORMS® EV3 system – teams of two, create multiple awe-inspiring Lego robots to achieve real world objectives. Our inspirations: the Mars Rover and comet lander, Philae. Plan, test, and modify robots to achieve timed mission challenges. Using ultrasonic, color, gyro and touch sensors, the robot interacts with it’s environment to collect specimens, navigate around large obstacles, create go-anywhere suspension to climb tough rocky terrain, and speed through the hard sand flats. Which team will be first? Which team will have the most accuracy? You are only limited by your imagination!
LINDSAY HUNTER (see bio on page 7)  JULY 9-13 | 9am-12:15pm  | #1055  | $205

GRAPHIC DESIGN BOOT CAMP (Grades 6-9)
Welcome to Adobe Creative Suite®, the premier software used worldwide by photographers, artists, and graphic designers. Explore the many and varied features of Adobe Photoshop® and Adobe Illustrator®. In Photoshop, discover how to make selections, fix and manipulate images and blend multiple images together using layers — then apply effects to your photos and text. In Illustrator, create and manipulate vector shapes, and combine simple shapes into more complex ones. Projects include designing and drawing your own character or logo. Take your creativity to the next level with cutting-edge technology.
HELEN BRADLEY (see bio on page 13)  JULY 9-13 | 9am-12:15pm  | #1056  | $190
INVESTING IN YOUR FUTURE (Grades 6-9)
Want to learn how to make your money grow and to finance all your future dreams? Investing is one way to achieve your aspirations. Learn how to invest money, understand the difference between stocks and bonds, the value of compound interest, and discover ways to invest your money to help it grow. Create a portfolio, including a variety of investments in both national and international companies. Find out what makes a stock a blue-chip stock and the different stock exchanges. Experience day trading and get answers to questions like “Is this a ‘high risk’ investment?” and “What’s the difference between a stock and a mutual fund?” Come invest your time and put your dreams into action.

PAUL OSSERMAN is a retired educator with 35 years of teaching experience and both the elementary and secondary levels. He received his B.A. and M.A. from Stanford University. Paul has been a G.A.T.E. coordinator and taught a variety of courses over the years.

JULY 9-13 | 9am-12:15pm | #1057 | $190

KAZAP! PHYSICS FOR SUPERVILLAINS (Grades 6-9)
Explore with hands-on activities the basic physics needed for all Minions and successful Supervillains! Observe the force, momentum, and pressure from a superhero’s punch. Measure the moment of inertia and build spinning gadgets by investigating bolas, tentacle beasts, and Beyblades. Identify the forms of energy generated by DC Comics’ Silver Banshee. Find out how Magneto and Electro use their powers to take over any city by building circuits and engines. Join us as we uncover the physics behind superheroes, supervillains, gadgets, and the impossible!

JEREMY QUALLS, Ph.D., is an Assistant Professor in the Physics department at SSU.

JULY 9-13 | 9am-12:15pm | #1058 | $190

THE AMAZEING ESCAPE ROOM (Grades 5-8)
Break out of an EXCEL-designed maze/escape room, then use what you learn to create your own. Investigate an array of puzzle types and discover the intricate systems for puzzle flow. Experiment with padlocks, simple circuitry, magnets, black lights, invisible ink, codes and ciphers as you design the mechanisms and of your room. Work with a team of fellow designers to develop clues, interactive objects, and challenges that lead players to a logical solution. At Friday’s Open House after plenty of testing, invite your family and friends to puzzle their way out of your escape room creation.

KRISTINE WARREN AND REBECCA YOUNG (see bios on page 17)

JULY 9-13 | 9am-12:15pm | #1059 | $190
TUT, TUT: ADVENTURES IN ANCIENT EGYPT (Grades 4-6)
Who can resist the allure of ancient Egypt? Step back to an amazing, sometimes awful, ancient time when pharaohs ruled, the great pyramids were built, and everyone believed in a fantastic afterlife. Answer such questions as: “Is there really a Mummy’s curse?” “How were the ancient pyramids built?” And “Why are they found all over the world?” Experience a day in the life of an Ancient Egyptian kid. Learn the art of mummification, and discover the “real” causes of death for Cleopatra VII and Tutankhamen. Decode hieroglyphics, create a cartouche, and pack for the afterlife all on the way to becoming an Egyptian expert!
ELIZABETH HENDRICKSON (see bio on page 17)
JULY 9-13 | 9am-12:15pm | #1060 | $190

WORLD OF WEARABLE ART (Grades 4-6)
Bring your shirts, pants, sneakers, hats, and more to class and turn them into cool wearable art! Using paint, ink, and dyes, we will transform your ordinary clothes into extraordinary masterpieces that go wherever you go. You could even get a jump on your Halloween costumes. Whether its geometric patterns or a beautiful line drawing, you will never look at your own clothes the same way again!
SANDRA ROSE NOVIA (see bio on page 18)
JULY 9-13 | 9am-12:15pm | #1061 | $190

REGISTER @ SONOMA.EDU/EXED/EXCEL
3D MODELING AND DESIGN WITH MAYA® (Grades 6-9)
Your path to become a 3D modeler begins now! Autodesk Maya® is an industry standard in 3D modeling and animation. 3D modeling and animation have transformed numerous fields, including filmmaking, computer games, architecture, and product design. You’ll use the same tools that pros use, learn valuable shortcuts and tips as you create your own 3D models, from character design to rigging. Welcome to the exciting world of 3D creation!

DAVID MEIRIK, B.S., is a credentialed teacher, artist and graphic designer who has worked from Los Angeles to Oslo, Norway. He currently teaches 3D animation, Graphic Design, and Entrepreneurship at Casa Grande High School in Petaluma.

10 WAYS TO SURVIVE THE ZOMBIE APOCALYPSE: A SHORT COMEDIC PLAY (Grades 5-9)
It’s the end of the world and hordes of rampaging zombies are about to kill you — what do you do?! Try your hand at kung fu against the undead? Attempt to reason with creatures that would rather eat brains than use them? Turn to this handy and hilarious production to survive the apocalypse! (Hint: sacrifice the weak is step number one...!)

RAYMOND SKIPP, (see bio on page 12) JULY 9-13 | 1-4pm | #1063 | $190

CODING GAMES WITH SCRATCH (Grades 4-6)
This multimedia adventure is the perfect course for aspiring coders. Create animated stories and games while learning programming concepts with Scratch. With this drag-and-drop platform developed by MIT, learn the essential building blocks behind object-oriented programming through creating fun, interactive stories, animations, and games. Let your imagination run wild and think creatively, and learn to share your creations on the web. Take home a copy of your own game at the end of this class. It could be the start of something BIG!

KRISTINE WARREN (see bio on page 17) JULY 9-13 | 1-4pm | #1064 | $190

CRIME BUSTERS (Grades 4-6)
A dastardly crime has been committed. Act as a real life detective and distinguish truth from lie. A speck of dust, a strand of hair, trailing footprints, clues piling up, suspects are everywhere. Using a range of scientific techniques, unravel fact from fiction and determine who the true criminal is. Analyze and match fingerprints, test powders, examine fibers and hair, and of course, consider that note that was left behind. Increase your powers of observation as you identify and eliminate suspects. Think like an investigator and recreate the crime scene, mapping out the incriminating clues and use evidence to determine “Who did it?” By the end of the day you should have a strong case against the villain, or is it villains?

PAUL OSSERMAN (see bio on page 20) JULY 9-13 | 1-4pm | #1065 | $190
KITCHEN CHEMISTRY (Grades 4-6)
Did you ever realize that there is amazing science happening everyday in your very own kitchen? Explore the chemistry behind cooking as you make goop, cause chemical reactions, and create yummy treats. Learn about candy making through experimentation with chocolate and sugar. Discover the most chilling ice-cream techniques under the sun. Test to see if you are a supertaster and take the Juice-Tasting Challenge. Bring molecular gastronomy into the mix and you’ve got a recipe for fun. All of our experiments can easily be shared with family and friends, and taste testing is strongly encouraged.
REBECCA YOUNG, (see bio on page 17)
JULY 9-13 | 1-4pm | #1066 | $190

MAKERSPACE @ SSU (Grades 5-8)
Dream, make, and innovate at the SSU Makerspace! Welcome to the emerging technologies in digital fabrication that were previously for industry use only. Use computer aided design software, 3D scanning and printing, as well as laser cutting, engraving, and CNC milling to explore and bring to life your creative ideas! Please note: Users are expected to conduct themselves in a safe and orderly manner at all times. The Makerspace has equipment and tools that when used improperly can result in injury. Users agree to comply with safety guidelines and obey the instructions of Makerspace staff at all times.
LINDSAY HUNTER (see bio on page 7)
JULY 9-13 | 1-4pm | #1067 | $205

PAINT LIKE THE MASTERS (Grades 5-9)
IDo you draw, sculpt, or paint? Then unleash your imagination by acquiring new techniques using the natural material of plaster to mix, sculpt, mold, and paint plaster art! Step outdoors (en plein air) and explore the art of fresco painting by preparing a panel much like the famous Michelangelo’s Sistine Chapel in Rome (only smaller of course!). You’ll create your fresco en plein air (which means in the great outdoors), painting what you see before your eyes rather than from a photograph. If you’ve never created art “en plein air”… you’re missing out!
SANDRA ROSE NOVIA, (see bio on page 18)
JULY 9-13 | 1-4pm | #1068 | $190
ARCHAEOLOGY IN ACTION: ARTIFACT LAB (Grades 6-9)
Do you love history or wonder how people survived hundreds of years ago without cell phones or internet? Have you ever wanted to know what archaeologists do or how they find out about the past? Join a professional archaeologist to sift through the sands of time and get some hands-on experience with real archaeological tools and artifacts. Use archaeological tools such as shovels, trowels, screens, and brushes to explore the evidence of the past. Participants must wear appropriate clothing for working outside, bring plenty of water, and be prepared to get dirty! Long pants and hats are a must and no open-toed shoes such as sandals or flip flops will be allowed while at the archaeological site.
WHITNEY MCCLELLAN (see bio on page 12) JULY 16-20 | 9am-12:15pm | #1069 | $190

DIGITAL PHOTOGRAPHY A.M. (Grades 4-6)
Learn to see the world around you, not just look at it, then capture what you see as you like! We’ll spend each day creating photographs around the SSU campus and on a field trip, exploring nature studies, landscape and cityscapes, candids, portraits (including selfies, in a whole new way), close ups, and more. Learn to better use your camera to creatively get what you see. You’ll be introduced to camera controls and settings and how to use them. Then how to catalog and develop photos on the computer to make them uniquely yours! At the end of the week you will have a slide show of photographs to share with friends and family. Bring your digital camera (charged!), extra battery and/or charger, memory card(s), a USB cable for connecting to the computer, your User Manual (either hard copy or pdf), and a flash drive or two (min. 32GB).
MURRAY ROCKOWITZ, a noted Bay Area photographer and teacher has served private and commercial clients for over 25 years and has exhibited his photography extensively in museums and galleries. Murray has taught at Napa Valley College, the Petaluma Arts Center and privately at his Petaluma studio. He is well known among collectors of fine art portrait photography for his insightful and beautifully crafted B&W portraits.
JULY 16-20 | 9am-12:15pm | #1070 | $190

DREAM TREE HOUSE DESIGN (Grades 4-7)
Make your dreams become a reality by exploring the architectural design process to design your own dream tree house. You will learn about the fundamentals of hand drawing, measurements, and the basics of design and space planning and use these skills to create plans and a model of your design. From your final design, create drafting blue prints of your floor plan and specific design elements (doors, windows, etc.). Give the house a 3-dimensional look by doing isometric sketches and truly be dimensional with a foam core house perched in a tree (branch). Color swatching will be used to decide on the exterior and interior colors of the home and your “house” will be ready to share.
KATHRYN HENDERSON (see bio on page 13) JULY 16-20 | 9am-12:15pm | #1071 | $190
KIDS COURT: MAKING YOUR CASE (Grades 6-9)
Do you swear to tell the truth, the whole truth, and nothing but the truth? Focus on the pretrial and trial processes as you are challenged to decipher the given evidence, and then build a case for a mock jury trial. Meet a judge, interview an attorney, and visit a courtroom. Become familiar with legal procedures while developing tactics and strategies for your part of the trial. The verdict lies in your hands! Parent drivers are needed for a field trip to the Sonoma County courts.

GARY GUTTMAN, B.A. in Communications, has taught English and humanities at several high schools, including Piner and Montgomery, and currently teaches English at Calistoga High School.

JULY 16-20 | 9am-12:15pm | #1072 | $190

MICRO:BITS (Grades 5-8)
Be creative and playful using Micro:Bits®! This little device has 25 LED lights that can flash messages, two programmable buttons, Bluetooth, temperature sensor, magnetometer, accelerometer, and much more. Working in teams of two, delve into the world of inquiry and problem-solving hardware, programming concepts, electronic components, and block-based coding. Projects include coding single player and multiplayer interactive games, engineering a wearable product, and even conducting a science experiment or two!

LINDSAY HUNTER (see bio on page 7)

JULY 16-20 | 9am-12:15pm | #1073 | $190

BRAIN GRAMES: NEUROSCIENCE FOR KIDS (Grades 4-6)
QUICK: Name the most powerful and complex supercomputer ever built. Give up? Here’s a hint: It’s housed in your head and it’s the one thing that makes you YOU. Your brain is mission control for the rest of your body and steers you through life. Not bad for something the size of a softball that looks like a wrinkled grey sponge! In this interactive class, based on National Geographic Channel’s Emmy-nominated series, Brain Games®, explore the parts of your brain and how it all works with cerebral STEM and MENSA challenges like Probably Probability, Fabulous Fibonacci, and the Science of Candy. Discover how you make decisions, and how your brain creates emotions, behavior, memory, and personality. So flex your mental muscles and let the brain games begin!

KRISTINE WARREN (see bio on page 17)

JULY 16-20 | 9am-12:15pm | #1074 | $190
STOP MOTION ANIMATION (Grades 5-9)
Camera + Computer + Creativity = Stop Motion Animation. Learn the FUNdamentals of creating stop motion animation by working in small groups to write a script, create a storyboard, build your characters, and design your scenes. Animate and photograph your action using a still camera and then use computer software to assemble the images into a stop motion animation sequence. Add sound effects, music, transitions, and a credit roll to complete your short film. Your choices include animate drawings, paper cutouts, clay characters, toys and more. Combining creativity and technology, this is your unique opportunity to become a film maker. On Friday, your animation will premiere at our class Stop Animation Film Festival.

HELEN BRADLEY (see bio on page 13)
JULY 16-20 | 9am-12:15pm | #1075 | $190

THE WORLD AROUND US: FINE ARTS LAB A.M. (Grades 4-6)
Create your own “Book of Life”— a visual journal inspired by the world around you. Using graphite pencil, ink, and watercolor washes, explore the world around you by focusing intensively on the mediums of illustration, drawing, and sketching. Develop visual perception and improve your skills through the use of different techniques and experienced instruction to really see and record the details of the world that you live in and capture its unique beauty.

SANDRA ROSE NOVIA (see bio on page 18)
JULY 16-20 | 9am-12:15pm | #1076 | $190

REGISTER @ SONOMA.EDU/EXED/EXCEL
**July 16-20**
**1:00-4:00pm**

**SESSION 5**

**AGE OF THE DINOSAURS (Grades 4-8)**
Travel back in time and enter a dangerous world inhabited by fearsome carnivores and the largest vegetarians that have ever lived on Earth. Dinosaurs were actually among the most successful animals ever to live on the Earth—their reign lasted over 100 million years! Follow the evolution of these extraordinary creatures through nature disasters to the present day. Investigate geologic time, fossil formation, and the Pangaea Supercontinent. Review new fossil evidence being unearthed all over the world, and become a dinosaur expert!

**NICOLE MYERS**, M.S. in Geological Sciences, developed a passion for geology from a childhood fascination with volcanoes. She has taught geology, paleontology, meteorology, climatology, oceanography and astronomy classes for seven years. She currently teaches at SSU and SRJC and brings her enthusiasm for understanding the Earth to the community through teacher education, after school educational science programs and earth science stories.

**July 16-20 | 1-4pm | #1077 | $190**

**DIGITAL PHOTOGRAPHY P.M. (Grades 6-9)**
Learn to see the world around you, not just look at it, then capture what you see as you like! We’ll spend each day creating photographs around the SSU campus and on a field trip, exploring nature studies, landscape and cityscapes, candids, portraits (including selfies), close ups, and more. Learn to better use your camera to creatively get what you see. You’ll be introduced to camera controls and settings and how to use them. Then how to catalog and develop photos in Adobe Lightroom to make them uniquely yours! At the end of the week you will have a slide show of photographs to share with friends and family. Bring your digital camera (charged!), extra battery and/or charger, memory card(s), a USB cable for connecting to the computer, your User Manual (either hard copy or pdf), and a flash drive or two (min. 32GB).

**MURRAY ROCKOWITZ** *(see bio on page 24)*

**July 16-20 | 1-4pm | #1078 | $190**
HISTORY’S MYSTERIES: CURIOUS CLUES, COLD CASES, AND PUZZLES FROM THE PAST (Grades 4-6)
Step back in time to examine evidence, decipher clues, study timelines, read witness statements, and draw your own conclusions to some of history’s most challenging cases. Which ancient civilization went the way of the dinosaurs? Is there any truth to the Yeti stories? Explore unexplained deaths and disappearances, like Amelia Earhart, and discover the fate of the Colony of Roanoke. Investigate mystifying monuments like Stonehenge. Visit the Titanic in depth with the help of Virtual Reality. Prepare yourself for a great adventure to the past!
KRISTINE WARREN (see bio on page 17)
JULY 16-20 | 1-4pm | #1079 | $190

IT’S SEW ELECTRIC! (Grades 5-8)
Design, build, program, and then wear your circuits! If you’re interested in interactive toys, light-up fashions, or interesting accessories, this class is for you! Play with cutting-edge technologies and learn programming, circuit design, and basic stitch sewing design in a whimsical fun way. Design and make a series of custom (yes, you are the designer!) projects that include a glow in the dark bookmark, sparkling bracelet, illuminating handbag, and luminescent stuffed animals. Watch your family and friends’ eyes light up, as you light up the LED on your creations.
KATHRYN HENDERSON (see bio on page 13)
JULY 16-20 | 1-4pm | #1080 | $190
MAKERSPACE @ SSU (Grades 4-6)
Dream, make, and innovate at the SSU Makerspace! Welcome to the emerging technologies in digital fabrication that were previously for industry use only. Use computer aided design software, 3D scanning and printing, as well as laser cutting, engraving, and CNC milling to explore and bring to life your creative ideas! Please note: Users are expected to conduct themselves in a safe and orderly manner at all times. The Makerspace has equipment and tools that when used improperly can result in injury. Users agree to comply with safety guidelines and obey the instructions of Makerspace staff at all times.

LINDSAY HUNTER (see bio on page 7)
JULY 16-20 | 1-4pm | #1081 | $205

PROGRAMMING WITH PYTHON® (Grades 5-9)
Code and create your own computer game with Python®. Learn how to make computer games using the popular Python programming language—even if you’ve never programmed before! Begin by learning basic programming concepts and use these skills to build classic games like Hangman or Tic-Tac-Toe, and then work your way up to more advanced games, like a text-based treasure hunting game or an animated collision-dodging game. Along the way, you’ll learn key programming and math concepts that will help you take your programming to the next level.

GEETA MENON, M.S., in Computer Science and B.S., in Mathematics and Computer Science has many years of programming and teaching experience in various schools, colleges and universities in the U.S. and her native country of Malaysia. She currently works as an information technology analyst/programmer at the School of Extended and International Education (SEIE) at SSU.

JULY 16-20 | 1-4pm | #1082 | $190

THE WORLD AROUND US: FINE ARTS LAB P.M. (Grades 6-9)
Create your own “Book of Life”— a visual journal inspired by the world around you. Using graphite pencil, ink, and watercolor washes, explore the world around you by focusing intensively on the mediums of illustration, drawing, and sketching. Develop visual perception and improve your skills through the use of different techniques and experienced instruction to really see and record the details of the world that you live in and capture its unique beauty.

SANDRA ROSE NOVIA (see bio on page 18)
JULY 16-20 | 1-4pm | #1083 | $190
THE WIZARDING WORLD OF J.K. ROWLING
(Grades 4-9)
The adventure continues from the gilded halls of Gringotts and the stronghold of ancient magic, Hogwarts, to the New York City of Fantastic Beasts and Where to Find Them. On your first day become a member of the either the Order of the Phoenix, Dumbledore’s Army, or the Order of Merlin. Go behind the scenes with JK Rowling as she guides us through the history of magic. Prepare your own Wizarding First Aid Kit that contains such items as Phoenix tears and Skele-Gro.

Explore the Department of Mysteries and design a bewitched object. Take a closer look at Hogwarts as you “take the Hogwarts Express,” discover the secrets of the ghosts that live there and the mysteries of the building itself using your own Marauders Map. Trace the family trees of several noted wizarding families and find your wizarding roots. Construct an alchemist scroll with several of your favorite magical creatures and spells. Craft a port key, remembrall, and color changing bezoar stone. At the headquarters of the Magical Congress of the United States of America (MCUSA) submit your application for a wand permit, determine which house in Ilvermorny you belong to, and select a mythical pet. End this magical week with a Philosopher’s Stone Treasure Hunt, Wizard’s Chess Tournament and epic Trivia Contest.

ELIZABETH HENDRICKSON, KRISTINE WARREN AND REBECCA YOUNG
(see bios on page 17)
JULY 23-27 | 9am-4pm | #1084 | $390
EXCEL AT SONOMA STATE UNIVERSITY – DIRECTIONS

From Northbound 101: Take Rohnert Park Expressway exit. Turn right onto Rohnert Park Expressway and follow to its end at Petaluma Hill Road. Right on Petaluma Hill Road to the stoplight at East Cotati Avenue. Right on East Cotati Avenue to the south entrance of the campus on your right. Please park in parking Lot A (designated spots) and walk your student to the EXCEL Tent which is located by Rachel Carson Hall, Room 68.

From Southbound 101: Take Rohnert Park Expressway exit. Turn left onto Rohnert Park Expressway and follow to its end at Petaluma Hill Road. Right on Petaluma Hill Road to the stoplight at East Cotati Avenue. Right on East Cotati Avenue to the south entrance of the campus on your right. Please park in parking Lot A (designated spots) and walk your student to the EXCEL Tent which is located by Rachel Carson Hall, Room 68.