



Kama Staton  
Career Guidance  
Education Associate  
SC Department of Education  
Office of Career & Technology Ed.  
(803) 734-8415

**We are**

**CATE!**

April 2014

Volume 1, Issue 5

*A monthly newsletter providing career guidance resources & updates for SC Career and Technology Education*

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**College Application Month (CAM)**

registration is now open! If your school would like to host a CAM event for upcoming CAM season, September—November 2014, a school guidance counselor will need to register the high school starting on **April 1,**

**2014,** through [www.sccango.org](http://www.sccango.org). The Carolinas Association of Collegiate Registrars & Admissions (CACRO) is partnering in this effort to ensure each high school who registers by **May 19, 2014,** receives support and representation it requires from area college admission counselors and volunteers. Since CAM's inception in 2009, the number of participating high schools increased from **12** to **186** in 2013. During the course of the program, over **108,356** high school seniors have had the opportunity to participate in CAM, which produced an estimated **199,756** completed and submitted college applications. In 2012 and 2013, of the students who completed student surveys, **24%** reported they were first generation college bound students.

**Dates will fill up quickly!**

**Register early to guarantee your school a spot at**

**[www.sccango.org](http://www.sccango.org)**

**EBS Student Award Nomination Forms**

**are due this month!**

Contact your Regional Career Specialist for further information.

*.....preparing our students of today for tomorrow!*



## DID YOU KNOW?

Healthcare is 8% of South Carolina's total employment. Healthcare related jobs will nearly double the rate of demand for employees over the next 10 years. In South Carolina these jobs will grow by 30% through 2020, more than any other industry, according to the [Center for Education and Workforce at Georgetown University](#) : the most dramatic growth of any sector in the United States. Workforce demands for professional and technical workers such as surgeons, psychiatrists, dentists, pharmacists, anesthesiologists, dietitians, and registered nurses, among others ,are expected to increase by 31% by 2020, to more than 8 million jobs. Jobs in the second major category, healthcare support, are forecast to grow by 26% over the next decade. By 2020, that number is projected to reach 4.6 million. These jobs include veterinary assistant, massage therapist, pharmacy technician, athletic trainer, home health aide, and other occupations. Physicians will account for 11% of new jobs, while nurses will make up 30%. Allied fields such as lab and X-ray technicians will make up 26% of the new positions. Support staff such as housekeeping and dietary will account for 34%, the report said. Healthcare will provide 12.3% of all new jobs over the next decade and 8.7% of all replacement jobs. It is necessary to prepare SC students for careers in the medical field promising high job demand with skills to perform in a fast-paced environment. The Health Science curriculum with career and technology education in SC is rigorous , while providing a seamless transition for these roles. Encourage students to join HOSA and/or your school to



become a HOSA chapter. HOSA provides hands-on , relevant experiences with academic integration. Below are highlights from **2014 SC HOSA State Leadership**

**Conference!** 1,275 future healthcare professionals registered!

66 Chapters participated  
 124 Advisors attended  
 115 Judges volunteered  
 1457 Competitors participated (includes students in recognition events)  
 6 Post Secondary competitors  
 53 Competitive events conducted  
 180 Voting delegates participated  
 16 State officer candidates campaigned  
 75 Courtesy corps served and over 200 volunteered  
 13 Exhibitors contributed  
 8 Educational symposiums conducted  
 18 Scholarships awarded  
 5 Hotels provided lodging  
 3 Off-site competitive events locations  
 \$12,650 in SC HOSA scholarship awards  
 \$4,650 Partnership contributions (Includes sponsors, advertisers & exhibitors fees)  
 \$17,300 Total partnership contributions, including scholarships

***Visit [www.schosa.org](http://www.schosa.org) for a list of winners!***



## **CTE: Building Bridges, Changing Lives**

Sunday, June 22—Wednesday, June 25, 2014

TD Convention Center, Greenville, SC

*The Education and Business Summit is South Carolina's largest annual professional development event for the state's educators and administrators. Over the years, the Summit has grown to attendance levels of 1500 plus. With four days of keynote presentations, concurrent sessions addressing best practices in career and technology education, and the opportunity to earn recertification credits on site, the Summit is an experience that you can't afford to miss. The Education and Business Summit will feature keynote presentations that excite and energize you as well as tons of hands-on workshops and demonstrations.*

Full conference details at [www.ebsummit.info/index.html](http://www.ebsummit.info/index.html).

### **SCACTE Career Guidance Division Day: Tuesday, June 24, 2014, at EBS!**

**Keynote Speaker:** Donna Milgram, Executive Director of the National Institute for Women in Trades, Technology, and Science. She will be highlighting the National Science Foundation for boosting recruitment and retention rates of women in technology programs and focus on the nontraditional movement in SC and STEM careers!

#### **Guidance Breakout Sessions:**

- SC College Admissions Panel representing 2 year and 4 year institutions, to keep our counselors abreast of the criteria, process, and what each are looking for in prospective students while providing admissions tips to prepare your students for a postsecondary path.
- Work-Based Learning Panel showcasing best practices across the state- sharing the who, what, when, where, why, and how to enter work-based learning into PowerSchool, making it a seamless process.
- A CTE panel featuring counselors across the state on how each tracks CATE student completers .



## **2014 MILITARY CAREER PATHWAYS 101**

**JUNE 17-19 COLUMBIA, SC**



### **STEM CAREERS IN THE MILITARY**

*3-Day professional development course providing exposure to the vast array of STEM career paths in the military*

\* Fort Jackson Tour \* NCO Panels \* Enlistment Process \* Shaw Air Force Base Tour \* Cyberspace Ops  
\* Weapons Loading \* Space Operations \* STEM Demos \* Healthcare \* Navy Nuclear Power \* Special Ops  
\* Post-Secondary Science/Engineering Tracks \* Military Battlefield \* Air Traffic Control

*Course is exclusive to current middle and high school level professionals such as core academic teachers (science, math), guidance counselors, career specialists, administrators, CATE instructors, etc.*

#### **REGISTRATION**

**\*Free registration\***

*\*Participant is responsible for meals, transportation, and hotel accommodations*

*\* Space limited to 100 participants \**

#### **COURSE PARTICIPANTS WILL:**

- Earn SDE recertification, LPC credit or GCDF recertification hours
- Network with Army, Navy, Air Force Military Leaders/ Recruiters
- Tour behind-the-scene military operations
- Learn future high-skill, high-demand STEM careers
- Explore post-secondary STEM tracks
- Make academic integration relevant
- Enjoy an experience of a lifetime!

#### **SPONSORED BY:**



U.S. AIR FORCE



**REGISTER ONLINE:** <http://goo.gl/5lIxca>

Office Phone: (803) 734-8415 Email: [kstaton@ed.sc.gov](mailto:kstaton@ed.sc.gov) Web: <http://www.ed.sc.gov/agency/programs-services/143/>





# YOUR PASSPORT TO ADVENTURE

# 2014

This award-winning series was chosen "best program" by the University Continuing Education Association.

[HTTP://SAEU.SC.EDU/ADVENTURES](http://SAEU.SC.EDU/ADVENTURES)

**JUNE 8-13**

## ADVENTURES IN PHARMACY

Rising 9-12 graders

Travel with us as we discover what it takes to become a pharmacist. You'll see that pharmacists work in communities, in educational institutions, for drug manufacturers, for hospitals, and with nuclear medicine to build patient records and medical files. Real-life pharmacists will show you how to read prescriptions and help with the preparation of medications, counsel patients, understand poison warnings, and learn patient drug regimens. You will learn about hypertension and diabetic monitoring, compounding, and intravenous techniques. This adventure includes working in the Pharmacy Lab at USC's School of Pharmacy.

## ADVENTURES IN GRAPHIC/ DIGITAL DESIGN

Rising 9-12 graders

Have you ever wondered how they made the logo for the Gamecocks, University of South Carolina, or for your favorite company? Create original graphic design pieces with edge and impact using the industry standard tools in the Adobe Creative Suite. Develop images, typography and logos for posters, movies, games and album art. Gain knowledge and skills in digital design while studying color, composition and presentation. A professional graphic designer from University of South Carolina will teach you how to design and transform your ideas in to a finished product, a portfolio full of your projects.

## ADVENTURES IN FORENSIC SCIENCE

Rising 9-12 graders

You have seen criminal investigation shows, now try your hand at sleuthing the elements of a crime scene by working with real-life crime scene investigators and law enforcement officers to help restore justice. Through hands-on opportunities and demonstrations, you will learn about latent fingerprints, bloodstain interpretation, footwear impressions, crime scene diagrams, and the collection of trace and DNA evidence. End your adventure by working on a team to investigate a mock crime scene and creating your own crime scene diagram!

**JUNE 15-20**

## AVIATION-LEARN TO FLY, BE A PILOT

Rising 6-9 graders

Come fly with us! In this unique adventure, you will go through a pilot training course taught by a certified flight instructor where you will learn the same information and perform the same flight maneuvers, as a student pilot going through flight school. The only difference is you will use flight simulators instead of real airplanes. Through presentations and hands-on demonstrations, you will study the same flight training curricula as a pilot, learn training operations and practice maneuvers using the laboratory flight simulators. This adventure will take place at the Challenger Learning Center of Richland County School District One, the only center of its kind in the state of South Carolina.

## ADVENTURES IN ROBOT PROGRAMMING WITH SCRATCH

Rising 6-9 graders

Learn how to program robots using the Scratch programming environment. Learn to make a simple robot accomplish various tasks, focused on using programming concepts, sensors, and motors. You'll learn to program your battle bot to hunt down and shoot its prey. The class is focused on developing software and control systems to accomplish a given job. No programming experience is needed. Students will be exposed to Scratch from MIT.

## ADVENTURES IN PHYSICS

Rising 6-9 graders

Dive into the world of physics by studying matter and its motion through space and time, along with related concepts such as energy and force. You will learn to apply physics to the real world in hands on activities and experiments and see that it's not just equations written in a textbook—but laws of nature that we can observe, prove and manipulate.

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Attend fascinating and interactive classes through hands-on activities including demonstrations, experiments, labs, building sessions, projects, and much more!

## Your Adventure Awaits!

Join us for serious fun this summer! Registration begins in January. It's the smart way to spend your summer!

803.777.9444  
pups@mailbox.sc.edu  
<http://saeu.sc.edu/adventures>



UNIVERSITY OF  
SOUTH CAROLINA



## CAROLINA MASTER SCHOLARS

**JUNE 22-27**

### ADVENTURES IN LAW

**Rising 6-9 graders**

Spend your day in court—as an attorney! Learn about concepts of the court system, criminal investigation, defense and prosecution, and evidentiary and trial prosecution. Work with real-life attorneys and law enforcement officers, tackling a real case from the moment the crime is perpetrated. At the end of the adventure, your team will work out the crime through a mock trial. You'll have the opportunity to visit local and supreme courts and see the legal system from the inside!

### ADVENTURES IN COMPUTER GAMING

**Rising 9-12 graders**

Venture into the exciting, interactive world of computer gaming! You'll use Adobe Flash to learn the skills behind graphics, modeling, animation, multi-level game design, artificial intelligence and basic programming techniques as: if/switch, for/while loop, & etc. Through instruction by USC's Computer Science department and hands-on programming, you will work in a group to create a finished product: your own 2-D game.

### ADVENTURES IN NEUROSCIENCE

**Rising 9-12 graders**

Let's try to understand the brain! In this course, you will cover the basic concepts in neuroscience with an emphasis on the relationship of brain to behavior. You will learn about the basic components of the nervous system, neural development, and what we know about the neurobiology of sensory, motor and sleep processes, motivation, learning, memory, and consciousness. You will also develop an understanding of how to study the workings of the nervous system and the underpinnings of neurological disorders. Class activities will include discussions on the brain and hands on activities including examination of human brains.

### ADVENTURES IN MEDICINE: CARDIOLOGY

**Rising 10-12 graders**

Considering a future in cardiology? Despite advances in diagnosis and treatment, diseases of the cardiovascular system remain the leading killer in the United States. The heart is a powerful and complex system. In this adventure, you'll unravel the mysteries of the heart from its development to its disease processes and novel ways to treat these including the use of tissue engineering and stem cells. You will work alongside physicians, scientists and medical students as they share their experiences about the heart and their passion for medicine. This adventure will include lectures and hands-on activities, as well as working in the gross anatomy lab at the USC School of Medicine.

**JULY 6-11**

### ADVENTURES IN VEX ROBOTICS

**Rising 6-9 graders**

Learn how robots think, sense, and function before designing and building one using the Vex™ Robotics Design System. Theory and learning sessions will alternate with building sessions. Consider the history of robots, how they are used now, and how they will be used in the future, as well as engineering concepts, electronics, sensors, and control subsystems. Round out your adventure in a robot demonstration by competing against other robot teams. No experience in robots is necessary.

### ADVENTURES IN GRAPHIC/ DIGITAL DESIGN

**Rising 6-9 graders**

Have you ever wondered how they made the logo for the Gamecocks, University of South Carolina, or for your favorite company? Create original graphic design pieces with edge and impact using the industry standard tools in the Adobe Creative Suite. Develop images, typography and logos for posters, movies, games and album art. Gain knowledge and skills in digital design while studying color, composition and presentation. A professional graphic designer from University of South Carolina will teach you how to design and transform your ideas in to a finished product, a portfolio full of your projects.

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### ADVENTURES IN HEALTH SCIENCES/PROFESSIONS

**Rising 6-9 graders**

Are you considering a career in health care? Explore a variety of health professions to determine which area you might like to pursue. Learn about the work of doctors, nurses, and physical and occupational therapists and master the basic anatomy of the human body. You will see how various health disciplines use anatomy and gain an understanding how it aids in the diagnosis and treatment of human ailments. Experience firsthand the challenges, opportunities, and rewards of the health professions through hands-on learning sessions. Explore the human body, musculoskeletal systems, physical movement, and interactions between body parts to get a foundation for your future in medicine. You will learn how to improve your own health, prevent disease, and teach others.

**JULY 13-18**

### ADVENTURES IN ENGINEERING AND COMPUTING

**Rising 9-12 graders**

Interested in engineering or computer science? Do you think that you might have the "knack"? Could you be a future computer scientist? Could you be a future engineer? Come learn about different types of engineering and computer science, and what engineers and computer scientists really do. You will be exposed to Computer Science, Mechanical Engineering, Electrical Engineering, Civil Engineering, Chemical Engineering, and Biomedical Engineering to get a clearer picture of what it means to earn a degree in one of these fields. This journey will include experiencing university labs where you will perform hands-on activities to personally experience how each field is unique and fascinating.

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### ADVENTURES IN MEDICINE: FUNCTIONAL ANATOMY

**Rising 10-12 graders**

Are you a competitive athlete, dancer, musician? Ever wonder why you are able to jump so high, or what muscles you are recruiting when holding a particular posture while playing your instrument? Then start learning about the intricacies of your human body and how you can improve your craft. Examine the musculoskeletal system and physical movement. You will work with a variety of clinicians, athletes and artists who will share their passion for their career choice but most importantly share with you why understanding functional anatomy is crucial. This adventure will include lectures, hands-on activities, working in the gross anatomy lab at the USC School of Medicine, and various functional workouts. Be prepared to be active, stretch and sweat and this is a great opportunity for students to improve their skills.



Office of Continuing Education and Conferences  
University of South Carolina

# University Test Prep

## SAT/ACT Summer Institutes

### Preparing for the SAT/ACT

The University of South Carolina understands the vital role that college entrance exams such as the SAT and ACT play in college admissions. University Test Prep offers serious preparation for these high-stakes exams. Acceptance into the student's school of choice can hinge on his/her performance on these standardized tests. The tests are designed to assess high school students' general education development and their ability to complete college-level work. Students who are properly prepared are more likely to perform to their highest potential. University Test Prep's SAT/ACT Summer Institutes offer comprehensive preparation for both tests.

### All Courses Include:

- 20 Hours of in-classroom instruction
- Experienced Test Prep Instructors
- Textbooks: The "Official SAT and ACT Study Guides"
- Workbook
- Lunch everyday
- Four (4) interactive online sessions held in the fall before the first SAT exam

### Course Curriculum

Our blended learning test prep program offers intensive classroom training by experienced test prep instructors, followed by periodic online review sessions.

### Test Taking Strategies

- Introduction to the SAT and ACT
- Questions
- Formats
- Time Management
- Process of Elimination

### Quantitative Subjects

- Comparisons; Picking numbers;
- Equations, Exponents; Fractions,
- Percentages and Averages; Rates,
- Ratios and Proportions; Lines,
- Angles, and Triangles; Circles;
- Polygons; Combined Figures;
- Coordinate Geometry; Volume and
- Surface Area; New Symbols

### Verbal Subjects

- Analogies
- Sentence Completion
- Critical Thinking

### SAT/ACT SUMMER INSTITUTES

**MONDAY - THURSDAY**  
**9:00 AM - 3:00 PM**

**USC COLUMBIA**  
**JUNE 23 - 26**  
**JULY 21- 24**  
**JULY 28 - 31**

**USC SUMTER**  
**JULY 21 - 24**

**USC AIKEN**  
**JULY 28 - 31**

**USC BEAUFORT/HILTON HEAD**  
**GATEWAY CAMPUS AT BLUFFTON**  
**AUGUST 4 - 7**

### For more information:

Visit: [www.saeu.sc.edu/testing](http://www.saeu.sc.edu/testing)

Email: [testprep@mailbox.sc.edu](mailto:testprep@mailbox.sc.edu)

Call: 803.777.9444

[www.saeu.sc.edu/testing](http://www.saeu.sc.edu/testing)

The University of South Carolina is an equal opportunity institution.



UNIVERSITY OF  
SOUTH CAROLINA

# STEM for girls

Are you an educator who would like to increase the number of females in your science, technology, engineering, and math (STEM) classrooms? Donna Milgram, executive director of IWITTS ( National Institute for Women in Trades, Technology, & Science) has provided a free special report to highlight proven practices that will help fill your classes with females.

In this special report, you will discover:

- ♦ The top secret in recruiting women and girls to your STEM classroom
- ♦ Examples of successful outreach campaigns and what made them work
- ♦ Key messages female students need to hear to get them interested in STEM
- ♦ and much more!

If you are ready to get female students excited about your STEM programs, visit the link below to get started!

<http://www.iwitts.org/free/white-paper#signup>

*Donna Milgram will be our keynote speaker at the 2014 SC Education and Business Summit for SC Career Guidance Division Day.*

*Be sure to sign up to attend at [www.ebsummit.info](http://www.ebsummit.info).*