

Horizon Students:

Horizon students are invited to register for the DUKE TIP as 7<sup>th</sup> graders. Now for 6<sup>th</sup> and 8<sup>th</sup> graders, there are opportunities to participate in the Duke TIP Academic Year FALL Weekend Programs. Registration begins on **Wednesday, August 26th at 5:00 pm**. Registration is first-come, first-served, and due to the popularity of events, there are waiting-lists for your top choice classes if you do not get into your top pick in time. See <http://coe.uga.edu/events/recurring/duke-tip> for more information.

You can access registration either through the [College of Education Torrance Center TIP page](#) (click on the registration link at the bottom).

*The Fall Dates are:*

Scholar Weekend - Grades 8-11

**October 10th-11th**

Academic Adventures - Grades 5 & 6

**November 14th**

**December 5th**

## **October 10<sup>th</sup> – October 11<sup>th</sup>, 2015 ~ Scholar Weekend**

### ***After the World Ends – Mary Kay***

Many of us speculate about what the End of the World will be like, but we tend to focus less on what happens *after* that. What will post-Apocalyptic times bring us? Will it be all devastation and destruction, or will there be a rejuvenation of life and spirit? In this course, we will look both at ancient mythologies from early civilizations that hypothesize how post-Apocalyptic times will manifest, as well as contemporary interpretations and renditions of the world's epilogue.

### ***Aircraft & Spacecraft Design – Dale***

In this class, you will explore the amazing world of flight and see how aircraft and spacecraft are designed and tested. You will discover how scientific principles, such as energy, momentum, pressure, and gravity, have led to incredible advances in aerospace technology. Experiment with various structural, propulsion, and control system designs, and take part in hands-on activities like designing, assembling, and flying styrofoam gliders, launching two-liter compressed air/water rockets, and trying out flight gear used by Air Force test pilots. Come find out what it means to make something fly!

### ***Appalachian Trails: Appalachia in Words, Images, and Music – Monica***

From Cherokee stories to mountain-top removal to Appalachian poetry: In this class, we will investigate the complex history of the Appalachian region. By looking at key traditions and events in Appalachian history, literature, and arts, we will examine the various ways in which Appalachia has been understood and described, from within and without. In this interdisciplinary class, we will explore literature, history, photography, music, and popular culture in order to unearth the heterogeneity of people, races, opinions, and communities in the region commonly known as Appalachia.

### ***Engineering Design Process - Alice***

Ever wonder about the exact process an engineer goes through to design and create, well, ... anything? Did you know that there are particular steps, processes, and metrics that all engineers must learn, whether they are designing a bridge, a parachute, or a roller coaster? Come learn this design process and start to think like an engineer as you are challenged to complete many engineering projects with your very own design team! In this class, your group will compete against others as you design comically complex Rube Goldberg machines, elegantly supportive egg cradles for our egg drop challenge, and much more! The skills you learn in this class will be indefinitely useful to you as you continue to grow as a problem-solver and future engineer.

### ***Philosophy for the 21<sup>st</sup> Century - Peter***

What is the nature of consciousness? Is there room for free will in a world perfectly described by physics? In a time of genetic engineering and mood-altering medications, what does it mean to be a person? Does the concept of intellectual property make sense in the Internet age? Can a diverse global community find common ethical ground? Science has proven to be a powerful tool to help us understand and navigate our world, but many of the most profound questions—questions of existence, ethics, and freedom—still cannot be answered by science alone. The oldest discipline, philosophy, provides the tools to think critically about the most pressing issues affecting our lives today. In this course, we will explore the methods of philosophy and apply them to controversial contemporary issues, moving beyond the usual two-dimensional political debates and arriving at nuanced, complex positions. Along the way, we will question all authorities—especially our own.

### ***The Process of Music: Music in Motion – A Cross-Cultural Examination – Maria***

Have you ever been curious about the music that we take for granted as we ride in the car or listen to an ipod? How is this music made? How did organized sound originate and evolve? Why is music an integral part of existing cultures? Music has been around for centuries, spanning cultures and affecting people emotionally, physically, and spiritually. How is technology changing the face of music and linking us globally? This course will provide an overview of the history of Western music, as well as examine music from other cultures. We will experiment with movement and the importance of movement as a part of the music making process, as well as create our own music with found objects and a looping pedal.

### ***Rube Goldberg Challenge - David***

Step up to the challenge of making your own Rube Goldberg machine. As seen in popular culture in movies and even music videos, Rube Goldberg-inspired fun has reached the mainstream. Now you can be part of the action as you and your classmates construct a working Rube Goldberg machine that spans the entire length and width of your classroom! The catch is that you'll have some challenging rules you must follow when building your machine: rules that will test your creativity, critical thinking, engineering skills and sometimes your patience. Are you up for it? Then join us for the Rube Goldberg Challenge.

### ***Sports Medicine - Deenene***

Come and see a new side of sports...the medical side! In this course, you will examine the three most important components of taking care of athletes and their injuries: diagnosis, treatment, and prevention. You also will learn the techniques and skills needed to properly implement each one. Whether you are asked to perform basic upper extremity taping, simulated first aid, or cranial nerve testing, you will not stay seated for long! This course culminates with "Rehab Olympics, where you will test your knowledge and newly learned skills by competing with your peers to quickly replicate challenges injured athletes might face.

### ***West Wing, Best Wing: US Foreign Policy in Television - Tara***

Although American politics courses reflect a rich theoretical and historical tradition, they typically lack opportunities for students to analyze abstract concepts through the interpretation of creative works. In this course, we will address this shortage of critical analysis by incorporating the television series, "The West Wing", into a more standard American Foreign Policy curriculum. We will address three specific layers of the series: substance, agency, and ethics. The series presents students with fictional foreign policy scenarios that typically stem from real or plausible events. Though imagined, these storylines provide students with common sources for discussion that they can approach without the prejudices attached to historical events.

If you have any questions, contact [dsharpe@uga.edu](mailto:dsharpe@uga.edu).