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## COS Links

June 2013

*COS Links* is a bi-annual publication of the College of Science (COS) at George Mason University (Mason). It is a list of resources for teachers and students and also provides guidance for teachers interested in forming educational partnerships with the college. For more information, please contact Reid Schwebach, College of Science Outreach Coordinator, at 703-993-4232 or [jschweba@gmu.edu](mailto:jschweba@gmu.edu).

## Opportunities

### **The 2013 Earth 2100 Conference, for Youth**

Participants will learn what's happening to the planet, create an alternative Youth Plan, and act to effect change in their lives and the lives of others! Interact with representatives from the United Nations Environment Programme and four key environmental think tanks. Participants will also learn about Mason's sustainability programs and will network with other young people from local colleges, universities, and high schools! On Saturday July 27, 2013 & Sunday July 28, 2013, at GMU Fairfax.

See: [http://www.ourtask.org/earth\\_2100\\_conference](http://www.ourtask.org/earth_2100_conference)

### **Center for Excellence in Education to host TEP Bite of Science session for teachers on October 8th.**

Bite of Science is one of six components of CEE's Teacher Enrichment Program for high school teachers to strengthen their professional development for the classroom. Bite of Science offers science teachers the opportunity to interface with scientists and engineers from industry, government, and academia. The College of Science at GMU will provide one of the speakers for the session. For more information about TEP and Bite of Science, please visit <http://www.cee.org/teacher-enrichment-program> or contact Natasha Schuh-Nuher, Director, TEP at [nschuh@cee.org](mailto:nschuh@cee.org).

### **Geography course for teachers**

The Department of Geography and Geoinformation Science ([ggs.gmu.edu](http://ggs.gmu.edu)) will be offering Geography for Teachers - 80470 - GGS 520 - 001 for the Fall 2013 semester, Wednesdays, 4:30 to 7:10. This course emphasizes problems and techniques in teaching geography; and current developments in research, methodology, and philosophy in the discipline. For information, please contact Teri Fede at [tfede@gmu.edu](mailto:tfede@gmu.edu)

**Check out *Periodic Elements*, a magazine about academic programs, research initiatives, and the people in the College of Science.** In this issue, you'll find out which COS alum shares her name with a new species of owl, learn about a new institute that focuses on issues related to global food and water security and other natural resources, and much more. Find it online at <http://cos.gmu.edu/periodic-elements>

**Mason biology & biochemistry "pencasts" are free and you can make your own STEMcasts.** These resources would be useful for helping students understand AP Biology topics. If you would like to learn how to make your own pencasts (for high-needs students: these are awesome supplement resources, according to some!), or how an advanced student could make these with your guidance, see <http://www.youtube.com/watch?v=hGcpmXlwdmg&sns=em>. The award-winning biology pencasts can be downloaded at: <https://www.mededportal.org/icollaborative/resource/643>  
For additional information, email [jschweba@gmu.edu](mailto:jschweba@gmu.edu)

## Opportunities, Cont'd.

### Keep an Eye on the Environment, with Mason's Environmental Science and Policy Newsletter

The Spring 2013 issue of GREENovation has been published online. You can see the current issue at: <http://esp.gmu.edu/news/research/newsletter.html>

### Professional development with Mason's College of Science

If you, your school, or teachers across your district would like to arrange a professional development opportunity to benefit science and math learning, contact Reid Schwebach at [jschweba@gmu.edu](mailto:jschweba@gmu.edu).

### High school students can take college courses at Mason

Consider applying at <http://admissions.gmu.edu/nondegree/prepare.asp>.

### High School students should plan to apply for next year's (2014) summer research program at Mason

The Aspiring Scientists Summer Internship Program (ASSIP) is a cornerstone of Mason's College of Science outreach. The online 2014 ASSIP application will be available November 15, 2013 and applications will be due by February 15, 2014. To learn more about the program and apply online please visit <http://assip.cos.gmu.edu/>

### Teachers are invited to see the student research results in August

The 2013 ASSIP program will immerse more than 60 high school and undergraduate students in STEM research projects. Come see the results of their research at the ASSIP Poster Session on August 9, 2013 from 9:30 – 11:30 AM at The Prince William Campus Beacon Hall, 10945 George Mason Circle, Manassas, VA 2011.

## Special Focus: Opportunities for Math Teachers and Students

### Math Circles for talented math students, and summer opportunities

Please see <http://www.fairfax-mathcircle.org/>. Contact Robert Sachs at [rsachs@gmu.edu](mailto:rsachs@gmu.edu) if interested in participating. For teachers: Dr. Sachs will be a part of the Fairfax County Public Schools Advanced Academics Conference after the school year is out. For students: Dr. Sachs will lead a summer enrichment course, Beyond BC Calculus, for two weeks (mornings only). July 8- 19, 9am to noon.

### Mason is offering Mathematics Professional Development Opportunities for K-12 Teachers.

Contacts: Dr. Padmanabhan Seshaiyer ([pseshaiy@gmu.edu](mailto:pseshaiy@gmu.edu)) and Dr. Jennifer Suh ([jsuh4@gmu.edu](mailto:jsuh4@gmu.edu))  
2 other courses have already closed!

**Title:** Teaching and Assessing 21st Century Skills in the Mathematics Classroom, A SCHEV sponsored Professional Development Program through GMU

**PRIORITY:** (A Focus on how creativity, critical thinking, communication, collaboration, decision-making and 21st century STEM program solving and learning look like in the mathematics classroom) **Priority grades 4-8 teachers**

**DATES:** July 15-19, 2013 (Monday – Friday) 8:30-3:30pm Summer Institute with Lesson Labs  
Fall Follow-up: Two webinars and a designated Lesson Study Date in the fall.

**LOCATION:** GMU FAIRFAX Campus

Please pre-register for the course at: <http://www.surveymonkey.com/s/9K7TPV8>

### Mason's Center for Outreach in Mathematics Professional Learning & Education Technology (COMPLETE) has professional development opportunities and resources for math teachers.

A number of problem-based lessons are available, especially for elementary and middle-school teachers. See: <http://completecenter.gmu.edu/> .

Contacts: Dr. Padmanabhan Seshaiyer ([pseshaiy@gmu.edu](mailto:pseshaiy@gmu.edu)) and Dr. Jennifer Suh ([jsuh4@gmu.edu](mailto:jsuh4@gmu.edu))

See past editions of COS-Links at: <http://cos.gmu.edu/COSLinks>