

## WKU Ogden Outreach

### School Visits

To schedule one or more of the Ogden Departmental Outreach activities listed below, feel free to contact the Ogden Science Outreach Coordinator, John Inman at (270) 745-3048 or [john.inman@wku.edu](mailto:john.inman@wku.edu), or by clicking the Schedule Activity button. Scheduling or getting more information can also be done with the contact person listed with each activity.

#### **BIOLOGY: <http://www.wku.edu/biology/>**

##### **\*Elementary Outreach ([School Visits](#))**

- Held year round at area elementary schools. Contact Cassandra Cantrell for more information at (270) 745-2638 or [cassandra.cantrell@wku.edu](mailto:cassandra.cantrell@wku.edu).

#### **CHEMISTRY: <http://www.wku.edu/chemistry/>**

##### **\*Chemistry Magic Show Presentation ([Field Trip or School Visit](#))**

-Held year round at school locations or here on the WKU Campus. Contact the Chemistry Department for more information at (270) 745-3457.

##### **\*Cub Scout and Boy Scout Mentoring for pins and badges ([School Visit](#))**

-Chemistry faculty can be available as a Chemistry Merit Badge Counselor, and to do the Webelos and Arrow of Light elective "Adventures in Science." Contact Dr. Stuart Burris in the Chemistry Department for more information at [stuart.burris@wku.edu](mailto:stuart.burris@wku.edu) or (270) 745-3457.

#### **COMPUTER SCIENCE: <http://www.wku.edu/cs/>**

##### **\*Student group/School visit-activity—"Hour of Code" ([School Visit](#))**

-Members of the WKU Chapter of the Association for Computing Machinery (ACM) can conduct an "Hour of Code" activity for students. "Hour of Code" events can be held year round. Contact the Computer Science Department for more information at (270) 745-4642 or [cs@wku.edu](mailto:cs@wku.edu). Link is: <http://www.wku.edu/cs/index.php> for more details about the program.

#### **ENGINEERING: <http://www.wku.edu/engineering/>**

##### **\*Engineering/Robotics talks ([School Visits](#))**

-Elementary or middle school groups may contact the WKU Department of Engineering for more information or to schedule someone to talk to your class about the Engineering profession and/or Robotics. Call (270) 745-2461 or email [engineering@wku.edu](mailto:engineering@wku.edu).

**GEOGRAPHY AND GEOLOGY: <http://www.wku.edu/geoweb/>**

\*WKU Student Chapter of the AMS/NWA—Public School Lecture Series (**School Visit**)

-Members of the WKU Student Chapter of the American Meteorological Society/National Weather Association are available to visit schools to discuss Meteorology topics. Contact Dr. Josh Durkee at (270) 745-8777 or [joshua.durkee@wku.edu](mailto:joshua.durkee@wku.edu) for more information about scheduling a school visit or field trip. Site: <http://www.wku.edu/meteorology/amsnwachapter.php>

**\*Green River Grotto (**School visit**)**

-The grotto is the WKU Student Chapter of the National Speleological Society. They often serve the community by mapping caves in the region, visiting property of concerned citizens who want caves or sinkholes on their property explored, communicating about cave and karst science with the public, etc. Their Facebook page is <https://www.facebook.com/groups/greenrivergrotto/>. For more information, contact the WKU faculty advisor, Dr. Jason Polk at (270) 745-5015 or [jason.polk@wku.edu](mailto:jason.polk@wku.edu).

**\*Science Day School Visits—Fossils (**School visits**)**

- For more information, contact Dr. Andrew Wulff at (270) 745-5976 or [andrew.wulff@wku.edu](mailto:andrew.wulff@wku.edu).

**\*Science Day School Visits --Rocks and Minerals (**School Visits**)**

- For more information, contact Dr. Andrew Wulff at (270) 745-5976 or [andrew.wulff@wku.edu](mailto:andrew.wulff@wku.edu).

**\*Kentucky Mesonet—(**School visits or Field trips**)**

-The Kentucky Mesonet is a research-grade environmental monitoring network that offers reliable weather and climate data to serve diverse needs in communities across the Commonwealth of Kentucky. Data from the Kentucky Mesonet is available in every K-12 classroom throughout the Commonwealth to support science and math education. For more information or to schedule a site visit or tour, contact Megan Schargorodski, operations manager for the Kentucky Mesonet, at (270) 745-4567 or [megan.ferris@wku.edu](mailto:megan.ferris@wku.edu). For more information about lesson plans, contact Scott Dobler, project manager and education outreach contact, at (270) 745-7078 or [scott.dobler@wku.edu](mailto:scott.dobler@wku.edu). Mesonet links: [www.kymesonet.org](http://www.kymesonet.org), <https://www.wku.edu/kymesonet/aboutkymesonet.php>.

**\*Kentucky Geographic Alliance (KGA)--Host school groups--geography, weather, GIS  
(Field Trips or School Visits)**

-The Kentucky Geographic Alliance (KGA), under the umbrella of the National Geographic Society, was established in 1987 as a partnership of K-12 teachers and academic geographers dedicated to improving the geographic literacy of Kentucky school children. KGA past events hosted:

**Events:**

- Teacher training: Summer 2013 GIS Lost River Cave El/Middle/HS teachers SS, Sci
- Leadership Institute: Fall 2014 Local School teachers interested in geography development
- Geographic Information Systems: Summer 2015: Training Teachers in GIS to disadvantaged schools
- Development of online training unit for Kentucky teachers in GIS: Was implemented summer 2014
- AP teachers: Outreach to AP geography teachers in Kentucky each year
- Kentucky in the News: Publication to all registered teachers in the state (monthly program)
- Outreach to pre-service teachers at WKU and Eastern Kentucky University, 2014
- Distribution of 250 National Geographic Society maps to Elementary, Middle, and High School teachers at the KY Council of Social Studies Teachers, 2014
- Attendance and Presentation of GIS at the KY Science Teachers Association meeting, 2014
- Giant Map from National Geographic Society in early fall 2014 on WKU campus
- Facebook and twitter postings, augmented spring 2015
- Electronic alliance newsletters and list-serve, monthly contacts
- Geography Awareness Week activities for teachers, Fall 2014
- Outreach to educators/students: National Geography Bee, Spring 2014

\*\*\* -We are interested in hosting student groups that are touring the campus for geography, weather and GIS activities. \*\*\*

For more information or to schedule a tour/field trip, contact Scott Dobler, KGA Co-director, at (270) 745-7078 or [scott.dobler@wku.edu](mailto:scott.dobler@wku.edu).

KGA link: <http://www.kga.org/index.html>

**MATHEMATICS:** <http://www.wku.edu/math/>

**\*Middle and High School Math Talks (School Visits or Field Trips)**

-The WKU Department of Mathematics offers a number of talks on math topics that would be suitable for middle school and high school students. The talks can be offered on-campus during a visit, or possibly the speaker can visit your school.

- The Math of Projective Motion –a nerf dart gun rig, dubbed by the speaker as “the Mathinator” (Algebra II background, trig would be nice, but not necessary.)
- Seeing Sounds –a guitar and some Fourier transform tricks
- Beautiful Mathematics – a graphical description of Newton’s method, leading to the generation of some really cool fractals (Algebra II background)
- A Tutorial on Chaos and Fractals – an introduction to a mathematical definition of “dimension”, and geometric structures that have non-integer dimensions. The Relationship between chaos, fractals, and randomness is explored with images.
- The Birthday Bet – an explanation of the birthday paradox, with the possibility of the speaker wearing a very silly wig.
- An Impossible Problem – an example of how simple assumptions and diligence can help solve a seemingly unsolvable problem due to a lack of needed information (Calculus background).

For more information or to schedule a Math Talk, contact Dr. Bruce Kessler at (270) 792-9790 or [bruce.kessler@wku.edu](mailto:bruce.kessler@wku.edu).

**\*Elementary and Middle School “Operation Comics” author visit (School Visit)**

– An introduction to the Operation Comics series from the author of the series (appropriate for young (3<sup>rd</sup> –6<sup>th</sup> grade) students, or elementary education preservice teachers). Site Link:

<http://www.wku.edu/operationcomics/>.

For more information or to schedule an author visit, contact Dr. Bruce Kessler at (270) 792-9790 or [bruce.kessler@wku.edu](mailto:bruce.kessler@wku.edu).

**SKyTEACH:**

\*SKyTeach students present science lessons to area school groups (**School Visits or Field Trip/Tours**)

-Elementary and middle school groups visit campus and SKyTeach students present science lessons in a 5E format.

For more information, contact Rico Tyler at (270) 745-3900 or [rico.tyler@wku.edu](mailto:rico.tyler@wku.edu).