WKU Ogden Outreach

Field Trips/Tours

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 <u>john.inman@wku.edu</u>, or by clicking the Schedule Activity button. Scheduling or getting more information can also be done with the contact person listed with each activity.

AGRICULTURE: <u>http://www.wku.edu/agriculture/</u>

*Individual Farm Tours (Field Trip)

-Held Year-round (Call to schedule) at the University Farm. High School Juniors and Seniors attend. Agriculture Ambassadors give farm tours to students and their parents. These students are considering enrolling at WKU and majoring in the field of Agriculture. Please contact Lindsay Meeks at (270) 745-3151 or <u>lindsay.meeks@wku.edu</u>. WKU Farm link: <u>http://www.wku.edu/farm/</u>

*Potential Student Tours (Field Trip/Tour)

-Held Year-round (Call to schedule) at the Baker Arboretum. Open to potential WKU Agriculture students interested in Horticulture. Students are given a tour of the Baker Arboretum. Please contact Lindsay Meeks at (270) 745-3151 or <u>lindsay.meeks@wku.edu</u>. Baker Arboretum link: <u>http://www.wku.edu/bakerarboretum/visit.php</u>

ARCHITECTURAL AND MANUFACTURING SCIENCES (AMS): http://www.wku.edu/ams/

*Architectural and Manufacturing Sciences (AMS) Department School group tours of Manufacturing Robotics Lab (Field Trips/Tours)

-Student groups may schedule field trips to tour, see a demonstration, and question and answer session with a professor in Manufacturing Robotics. Robotics lab is located on the WKU Campus in the Environmental Sciences and Technology Building (EST). For more information or to schedule a field trip, contact Dr. Muhammad Jahan at (270) 745-2176 or Muhammad.jahan@wku.edu.

BIOLOGY: http://www.wku.edu/biology/

*School group tours/field trips (Field Trip/Tours)

-Held year round at various locations. Contact Cassandra Cantrell for more information at (270) 745-2638 or <u>Cassandra.cantrell@wku.edu</u>.

*Admissions Recruitments (Field Trip)

-Held year round typically at Thompson Complex Center Wing (TCCW), Engineering and Biological Sciences Building (EBS), and Snell Hall (SH). Contact Cassandra Cantrell for more information at (270) 745-2638 or <u>Cassandra.cantrell@wku.edu</u>.

*Green River Biological Preserve tours (Field Trip/Tour) -Contact Dr. Albert Meier for more information at (270) 791-9442 or <u>albert.meier@wku.edu</u>. Link for WKU Green River Preserve is: <u>http://www.wku.edu/greenriver/</u>

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.

ENGINEERING: http://www.wku.edu/engineering/

*"Egg drop" Activity (Field Trips)

-"Egg Drop" Field Trips are held year round in WKU's Engineering and Biological Sciences (EBS) Building High Bay. A variety of different impromptu design experiences, and demonstrations of WKU Engineering projects can be provided to for groups of ~10-30 students from local and regional elementary and middle schools. Contact Dr. Kevin Schmaltz for more information at <u>kevin.schmaltz@wku.edu</u>.

*School group tours—Robotics; Engineering (Civil, Electrical, Mechanical) (Field Trip/Tour) -Contact the WKU Department of Engineering for more information or to

schedule your group's tour of the WKU Department of Engineering while focusing on one of the engineering areas—Civil, Electrical, or Mechanical. Groups may also choose to focus their tour on robotics. Specify your preference when scheduling the tour. For more information, contact the WKU Department of Engineering at (270) 745-2461 or engineering@wku.edu.

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

*Geocache field trips (Field Trip)

-Contact Kevin Cary at (270) 745-2981 or <u>kevin.cary@wku.edu</u> or Scott Dobler at (270) 745-7078 or <u>scott.dobler@wku.edu</u> for more information about scheduling a Geocache field trip to WKU.

*Geographic Information Systems (GIS) field trips (Field Trip)

-Contact Kevin Cary at (270) 745-2981 or <u>kevin.cary@wku.edu</u> or Jun Yan at (270) 745-8952 or <u>jun.yan@wku.edu</u> for more information about scheduling a GIS field trip to WKU.

*GIS Club Outreach (Field Trip)

- Contact Kevin Cary at (270) 745-2981 or <u>kevin.cary@wku.edu</u> or Jun Yan at (270) 745-8952 or <u>jun.yan@wku.edu</u> for more information about scheduling a GIS field trip to WKU.

*WKU StormToppers Network Outreach (Field Trip/Tour)

- For more information and to schedule tour/field trip, contact Dr. Josh Durkee at (270) 745-8777 or <u>Joshua.durkee@wku.edu</u>.

*College Heights Atmospheric Observatory for Students (CHAOS)—(Field Trips) -For more information and to schedule tour/field trip, contact Dr. Josh

Durkee at (270) 745-8777 or Joshua.durkee@wku.edu.

*Barren River Outdoor Center (Field Trips/Tours)

- For more information or to schedule tour/field trip, contact Dr. John All at (270) 745-5975 or John.all@wku.edu.

*Community Garden and Food Forest at Baker Arboretum (Field Trip/Tour)

- For more information or to schedule tour/field trip, contact Dr. John All at (270) 745-5975 or <u>John.all@wku.edu</u>.

*American Climber Science Program (Field Trip or School Visit)

- For more information, contact Dr. John All at (270) 745-5975 or John.all@wku.edu.

*Kentucky Mesonet—(Field Trip or School Visit)

-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 <u>megan.ferris@wku.edu</u>. For more information about lesson plans, contact Scott Dobler, project manager and education outreach contact, at (270) 745-7078 or <u>scott.dobler@wku.edu</u>. Mesonet links: <u>www.kymesonet.org</u>, <u>https://www.wku.edu/kymesonet/aboutkymesonet.php</u>.

*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: Will be 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 Western Kentucky University and Eastern Kentucky University, 2014
- Distribution of 250 National Geographic Society maps to Elementary Middle and High School teachers at the Kentucky Council of Social Studies Teachers 9/14
- Attendance and Presentation of GIS at the Kentucky Science Teachers Association meeting in 11/14
- Giant Map from National Geographic Society in early fall 2014 on WKU campus
- Facebook and twitter posting (to be augmented in spring 2015)

- Electronic alliance newsletters and list-serve (monthly contacts)
- Geography Awareness Week activities for teachers (Fall, 2014)
- Outreach to educators/students: National Geographic 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 for a school group, contact Scott Dobler, KGA Co-director, at (270) 745-7078 or scott.dobler@wku.edu.

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

MATHEMATICS: http://www.wku.edu/math/

*Middle and High School Math Talks upon request (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).
- What Dimension Is This? an introduction to a mathematical definition of "dimension", and geometric structures that have non-integer dimensions.
- 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).

Contact Dr. Bruce Kessler for more information at <u>bruce.kessler@wku.edu</u> or (270) 792-9790.

PHYSICS & ASTRONOMY: <u>http://www.wku.edu/physics/</u>

* Hardin Planetarium (Field Trip)

-Elementary and Middle School Group Field Trips -- Occasionally, the Hardin Planetarium works with SKyTeach Master Teachers and their SKyTeach Students to present lessons to half the students while the other half of the group is enjoying the planetarium show. These planetarium shows are no charge. Contact Ronn Kistler for more information at <u>ronn.kistler@wku.edu</u> or (270) 745-4044. Link: <u>http://www.wku.edu/hardinplanetarium/school field trips.php</u>

*Public Telescope Viewing at the WKU Astronomical Observatory (roof of Thompson Complex Center Wing-TCCW) (Field Trip)

-Shortly after sunset on the second Wednesday of every month (except June and July), astronomers from WKU's Physics and Astronomy Department offer the public an opportunity to observe the heavens through the telescopes on the TCCW roof. There is no charge for admission. Meet in the lobby of TCCW-next door to the Hardin Planetarium. A brief indoor program will be presented if weather conditions do not permit observing. Children 12 years of age and under must be accompanied by an adult. Contact the Physics and Astronomy Department for more information at info@physics.wku.edu or (270) 745-4357.

SKyTEACH:

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

-Elementary and middle school groups visit campus and/or the Hardin Planetarium. SKyTeach students present science lessons in a 5E format. For more information, contact the SKyTeach office at <u>skyteach@wku.edu</u> or (270) 745-3900.