Guitar virtuoso Jesse Ed Davis (1944-1988) was born and raised in Norman and attended OU, but left school to become one of the most respected and sought-after session musicians in rock history. He played with almost
everyone, from Eric Clapton to the Monkees (that’s Davis playing the catchy opening riff on “The Last Train to Clarksville”).

This is the sixteenth week of the Fall 2015 semester.

**ALERTS:**

- **Fall 2015 Course Evaluations** remain open until this Sunday, December 13 at 12:00 AM. *This is your official opportunity to voice your opinions and suggestions about the courses you are enrolled in this fall.* Please go to eval.ou.edu to log in!
- **Final Exams** for the fall 2015 semester begin ONE week from today, on Monday, December 14. Go [here](#) for information on Finals, including a link to the schedule. Make sure you know *when* and *where* your finals take place.
- **Calling all** Fall 2015, Spring 2016 and Summer 2016 Degree Candidates! We would greatly appreciate it if you would take the College’s Graduation Exit Survey [here](#).
- **If you have not enrolled** for spring and summer 2016 yet, and do NOT have a Bursar’s Stop, please contact Asst. Dean Hempe at mahempe@ou.edu
Therapy Dogs arrive this week!

We’re thrilled to welcome some of our best friends this Wednesday - Friday (12/9 - 12/11) in the NWC Library, during Pre-Finals Week. Our canine pals are coming to help relieve stress for ALL A&GS majors, undergrad and grad, Geography,
Meteorology, GIS, and Environmental Sustainability. Dogs don’t care what you major in! They’re just here to remind you that life is good. Stop by for a calming visit! Just a reminder that Second Chance is solely a volunteer organization and they would be very grateful if you could donate any of the items listed on the poster above.

Our Top Ten Favorite Study Tips:
With Final Exams on the horizon, it’s a good time to remind everyone of our Top Ten Favorite Study Tips:

WRITE IT DOWN. Research has found that the act of holding a pen and creating shapes on paper sends feedback signals to the brain, leaving a "motor memory" which makes it easier to later recall the information. Typing or digitally recording did not have the same cognitive effect.
CHANGE IT UP. If you start to lose motivation, switch to a new study location, e.g., if you’ve been studying in your room, go to the NWC library. "When the outside context is varied, the information is enriched, and this slows down forgetting,” psychologist Dr. Robert Bjork told The New York Times.

Try Meditation. Meditation has been shown to boost focus and improve test scores. Or take a breather; taking a 10-minute walking break can improve your focus for up to two hours afterwards.

Put your electronics away for a while – especially your cell phone! Dedicate all your attention to studying, and not to answering calls, texts, or tweets that you can easily respond to later.
Test yourself. Giving yourself a practice test is a great way to ease pre-exam jitters and point out gaps in your knowledge – and it’s much more effective than highlighting and hoping you’ll remember.

Drink Lots Of Water – especially if you’ve been drinking a lot of coffee or energy drinks, which are dehydrating. Even mild dehydration can impair cognitive functioning and mental performance. So make sure to keep a bottle of water next to you at all times when you're studying.

DO NOT CRAM. Cramming is actually counterproductive. Not only will you be exhausted the morning of exam, but your brain won't be able to remember what you studied. **You must sleep after study**, to allow your brain time to “soak in the knowledge.” Pace yourself and get a good night’s sleep before any exam.
Make It A Group Effort.
Studying in a group can be helpful, if you choose the right group and stay focused on the material so that your studying doesn't veer off-course.

Take time for a “Power Pose” right before your exam. The simple act of striking a strong pose boosts confidence and lowers stress.

Listening to soothing classical or instrumental music can help a wandering mind stay focused. Workers who listened to music completed their tasks more efficiently and came up with better ideas than those who didn't. This fall, we’re recommending *Esperanza II*, a magical new age album of flamenco-inspired guitar from American composer Carlos Jonathan Villalobos, Jr. You can hear the whole albums [here](#).
This week’s Seminars:

Today at noon:

Ariel Cohen, doctoral degree candidate from OU’s School of Meteorology will present his dissertation defense, “Southeast U.S. Cold Season Severe Thunderstorm Environments and Their Depictions Using Multiple Planetary Boundary Layer Parameterization Schemes,” TODAY, December 7, at 12:00 PM in the National Weather Center, Room 1120.

On Thursday...
MARS: THE AGE OF SPACE EXPLORATION

Join the College of Atmospheric & Geographic Sciences and the National Weather Center for a look at space exploration from Galileo’s perspective.

December 10, 2015
Public forum from 7-8:30pm
free reception at 6:30pm

• Meet Chief Scientist, Mars Program Office - Dr. Richard Zurek
• Discuss NASA’s three space missions to Mars
• We’ve had a rover on Mars, but are humans on Mars next?
• Could there have been life on Mars? Or is there now?

Admission is free and open to all who can attend!
No RSVP necessary!

National Weather Center • 120 David L. Boren Blvd, Norman, OK

For accommodations on the basis of disability for this event call 405-325-3095.

And on Friday...
The University of Oklahoma
Department of Geography
and Environmental Sustainability
Seminar Series

Colloquium
Fall 2015

September 18
Rezau Mahmood
Department of Geography and Geology
Western Kentucky University

September 25
Jimmy Adegoke
Department of Geosciences
University of Missouri Kansas City

October 23
Jeff Wilson
The Dumpster Project
Huston-Tillotson University
Austin, TX

October 30
Jennifer Koch
Department of Geography and Environmental Sustainability
University of Oklahoma

November 20
Corin de Freitas
Liu Institute for Global Issues
University of British Columbia

December 11
Jad Ziolkowska
Department of Geography and Environmental Sustainability
University of Oklahoma

Environmental Economics and Its Diverse Dimensions

Jad Ziolkowska
Department of Geography and Environmental Sustainability
University of Oklahoma

Economics is a science of choice and tradeoffs in allocation of scarce resources among competing uses and users. Environmental economics allows us to understand economy-environment systems and to find an equilibrium maximizing our welfare. Environmental problems are complex, multicolored, multidisciplinary, and difficult to evaluate solely with standard price and market based mechanisms. Those discipline-related challenges determined my research path and were the main drivers for an internal need to face diverse environmental questions and find answers that did not exist or were addressed in a limited scope.

I joined the Department of Geography and Environmental Sustainability last year and would like to take the opportunity given by this seminar to introduce my research. My background is in natural resource, environmental, water, bioenergy and agricultural economics. My research addresses a diversity of economy-environment related subjects, including, among others, agro-environmental programs, sustainable development, environmental conservation and bioenergy (especially conventional and advanced biofuel). The current research focus are water economics and management, value of water resources, desalination, energy efficiency, economics of food waste and food loss, and impacts of drought on regional economies. I'm also working on spatio-temporal aspects of the enumerated research questions to develop a multi-dimensional perspective on the economy-environment interactions. Providing answers at the intersection of water, energy, and food is especially important in my research, as it can help develop approaches for a more sustainable future.

Sarkeys Energy Center (SEC) A235
December 11 at 3:30 pm

For more information visit http://geography.ou.edu/
Accommodations on the basis of disability are available by contacting the Department of Geography and Environmental Sustainability at 325-3325
Female Mathematician wins Presidential Medal of Freedom

The Presidential Medal of Freedom is the USA’s highest civilian honor, presented to people who have made especially meritorious contributions to the security or national interests of the United States, to world peace, or to cultural or other significant public or private endeavors. The 2015 awards were presented at the White House on November 24th; among the seventeen honorees were several musicians, a film director, numerous public servants, a few athletes -- and we’re thrilled to say -- a mathematician!

Katherine G. Johnson (b. 8/26/1918) is a mathematician and physicist who made significant contributions to the NASA space program, especially in the early application of digital electronic computers. She was so good that NASA had her check the computer's figures before John Glenn took off to orbit the Earth for the first time! She also calculated the trajectory for the 1969 Apollo 11 moon flight. Learn more about this great STEM pioneer here.
A&GS Open Courses:

The following A&GS Courses are still open:

**AGSC 3011**, Career Planning and Development for A&GS Majors.

*AND...*
METR 5503: Climate Dynamics
Dr. Elinor Martin (elinor.martin@ou.edu)
Spring 2016: MWF 2-2.50pm

Want to understand how your research interests fit into the global climate system?

• This course provides an introduction to climate and climate dynamics, examining global and surface energy budgets, atmosphere and ocean circulations, climate feedbacks, interactions between components of the Earth system and climate modeling.

• Experience the peer-review publication process as you complete a research project related to climate dynamics. No exams!

• Open to graduate students and senior meteorology undergraduates with instructor permission.
ANNOUNCEMENTS FOR MM?
If you have any announcement you would like posted in
Monday Memo (e.g., meetings, seminars, jobs, internships or just some great news) please send it to Asst. Dean Hempe (mahempe@ou.edu) by Friday at noon to appear in the next week’s edit

The USS Oklahoma lies capsized and mortally wounded at Pearl Harbor.

On This Day In History:

In 1787, Delaware delegates unanimously voted (30-0) to ratify the U.S. constitution, becoming the first of the United States in the process. By the way, did you know that Delaware is only 96 miles long and 35 miles across at its widest point? It’s not quite 2,000 square miles and has only three counties! By comparison, Oklahoma is nearly 70,000 square miles and has 77 counties.

In 1796, 61-year-old John Adams was elected to be the second president of the United States. Exactly 40 years later, 53-year-old Martin Van Buren was elected the eighth president of the United States in 1836. Van Buren is considered to be the first “professional politician” to hold the office.

In 1926, the gas-operated refrigerator was patented by The
Electrolux Servel Corporation. Swedish engineering students Carl G. Munters and Baltzar von Platen invented the new marvel, which replaced the toxic gases used in previous models with a tiny gas flame and a tiny flow of water that circulated a liquid refrigerant hermetically sealed in rigid steel. By 1927, the Electrolux-Servel was the sole gas refrigerator on the US market until the 1950s. In 1934, 36-year-old pilot Wiley Post discovered the jet stream when he flew into the stratosphere over Bartlesville, Oklahoma. Post had long been interested in testing the “thin air” above 50,000 feet, but his beloved plywood plane the Winnie Mae could not be pressurized. With the financial assistance of Oklahoma oil pioneer Frank Phillips and engineers at B.F. Goodrich, Post was able to create a pressurized flying suit, which became the forerunner for the modern space suit. By March, 1935, Post flew from Burbank, California to Cleveland, Ohio in the stratosphere using the jet stream. In 1941, 200 Japanese warplanes launched a sneak attack at 7:55 AM on the naval base at Oahu Island’s Pearl Harbor. More than 3,400 Americans lost their lives that Sunday morning, which, as President Franklin D. Roosevelt later said, would be “a day which will live in infamy.” Eighteen U.S. ships (including the USS Oklahoma) were destroyed, sunk, or capsized. More than 180 planes were destroyed and 150 were damaged, leaving just 43 operational aircraft. The attack resulted in the United States entering into World War II. In 1946, a fire at the Winecoff Hotel in Atlanta killed 119 people, including the hotel’s owners. It remains the worst hotel fire in U.S. history. Ironically, the 15-story Winecoff was advertised as “absolutely fireproof.” While the exterior was, the interior was full of combustible stuff. Making matters worse, the hotel had only one set of exit stairs. In 1972, the 363-foot tall Apollo 17 was launched from the
Kennedy Space Center in Florida. It was the first nighttime launch, and the final Apollo moon mission. On board were Commander Eugene Cernan, Command Module Pilot Ronald Evans, and Lunar Module Pilot Harrison Schmitt. The three astronauts safely returned to Earth on December 19, 1972. 

In 1988, over 60,000 people were killed and a half a million buildings destroyed when two earthquakes hit Armenia. The first, measuring 6.9 on the Richter scale struck Spitak (pop. 30,000) at 11:41 AM. Four minutes later, a 5.8 quake struck just a few miles away. The super-destructive quakes also opened up an eight-mile crack in the Earth’s surface, which was several feet wide in spots.

In 1995, the unmanned spacecraft Galileo arrived at Jupiter and entered orbit after six years of travel, becoming the first Earth-based spacecraft to do so. Galileo spent the next eight years studying the giant planet and its moons, Io and Europa. Galileo finished its Jovian mission on September 21, 2003. The hardworking spacecraft was directed into Jupiter’s atmosphere at a speed of nearly 30 miles per second, destroying it to avoid any chance of contaminating local moons with bacteria from Earth.

In 2003, a 12” x 26” painting of a river landscape and sailing vessel by Martin Johnson Heade sold at auction for just over $1 million. Heade (1819-1904) was a prolific, if largely unknown, painter during his lifetime, but is now considered to be one of the greatest American romantic painters ever. This particular painting was found in the attic of a suburban Boston home where it had been stored for more than 60 years. It was in bad shape (covered in dust, with some paint missing) but it was still in its original 19th-century gilt frame.

And your parting shot(s):
Madrid-based artist Gonzalo García Calvo has taken origami to a spectacular new level. The incredible sculptures below were each created from just one piece of paper. To see more of the master’s works, go here.
Please remember to like us on Facebook (https://www.facebook.com/OU.AGS) and follow us on Twitter (@OUAGS)!

The College of Atmospheric and Geographic Sciences
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