



MTSU
College of Basic and Applied Sciences



The Basic Facts

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The Science of Success

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MTSU Hosts National Equine Events

Patrick Kayser was in charge of local arrangements for the National Equine Science Society's (ESS) annual conference held at Embassy Suites in Murfreesboro, June 1-4. National leaders in equine



research and education were in attendance. The plenary talk was about cloning horses given by two veterinarians from Texas. They have successfully cloned over 100 horses. Prior to the start of the Equine Science Society (ESS) conference, the National Association for Equine Affiliated Academics (NAEAA) held its an-

nual meeting at the Embassy Suites. Patrick Kayser, Rhonda Hoffman, Dave Whitaker, and Warren Gill all participated and contributed to the success of the ESS conference.



Aerospace Receives Scholarship Support

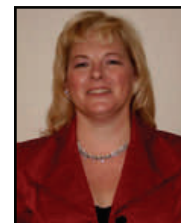
Thanks to Raul Regalado, President and CEO of the Metropolitan Nashville Airport Authority Board, MTSU Aerospace students will receive BNA Scholarships



next year. Vice Chair, Juli Mosley, presented a check to AERO Chair, Wayne Dornan, for \$14,250. We are grateful to BNA for this significant investment in our program.

Lee Ann Newton in the News

Executive Aide to the Tennessee Mathematics, Science and Technology Education Center (TMSTEC), Lee Ann Newton, received the AM-VETS's highest honor, the Silver Bayonet Veterans Service Awards on June 11, for her role in directing Operations Christmas Care, a program that serves wounded soldiers during the holidays. She also made the front page of *The Daily New Journal* with a story about her editing of the "Civil War Memoirs of Erastus Winters," which was first published in 1905.



Another First for Aerospace Education

Using funds from a NASA grant, Dr. Paul Craig, AERO professor, and colleagues designed a unique learning laboratory, The Flight Operations Center- Unified Simulation (FOCUS) Lab, that integrates hands-on experiences from their professional pilot students, dispatch and air traffic control students, maintenance management students and airport management students. The new laboratory,

unique in academics, is modeled after operations at a large airline where a group of professionals from various areas of aviation help the airline solve critical problems. Another neat feature of the new FOCUS lab is that our Psychology faculty have partnered with Dr. Craig and colleagues to study human factors. It is an amazing addition to training new aviation professionals. (see photo on back)



The Science of Success

Visit our newsletter web site to view all *The Basic Facts*' issues:
http://www.mtsu.edu/cbas/basic_facts.shtml



The Basic B.E.S.T. (Boastful Educators Sharing Talents)

All departments are invited to submit items for this column

Aerospace

Aerospace Learning Laboratory



(see article on front page)

Agribusiness/ Agriscience

Warren Anderson attended the Tennessee Chapter of the Soil and Water Conservation Society spring meeting which included sessions led by K. Brown, NRCS State Conservationist, J. McClurkan, Water Resource Manager, Tennessee Department of Agriculture, and Joe Carpenter, Assistant Commissioner of Environment & Planning for TDOT. Warren Anderson presented at the Society of American Military Engineers (SAME) about the MTSU Rain Gardens from fall 2005 to spring 2010.

Warren Anderson wrote a one page article for *The Scoop*, a Rutherford County Master Gardener Newsletter, titled "Habitat for Humanity Community Gardens." Warren Anderson and Pat Whitaker helped supervise the establishment of a Spring Valley-Rolling Hills community garden.

Biology

The "Earth, Energy and Civilization Grant" written by Kim Sadler, funded the MTSU Aerospace Camp. The camp involved 70 students from five schools around the county, including a tour of various airports and a visit to the U.S. Space and Rocket Center in Huntsville, Alabama. Students were also introduced to a flight simulator hooked up to a laptop at Black Fox Elementary.



Chemistry

Judith Iriarte-Gross gave an invited talk during the "Break the Barriers" Forum on June 3. It was an opportunity to learn more about women in non-traditional and green jobs with a focus on girls in STEM.

Engineering Technology

MTSU student car builders showed real improvement at the 2011 Baja SAE competition in Birmingham, Alabama. Students worked diligently on a project that incorporated



skills needed in the workforce: project management, decision making, leadership, critical analysis, and problem solving. Baja SAE is a collegiate engineering competition with the goal of building a single seat off-road recreational vehicle that is safe, fun to drive, easy to maintain, and has the ability to be mass produced and sold to the public. The vehicle must survive the severe punishment of rough terrain, mud, and water.

The East competition features the water maneuverability event, which is the



most demanding and grueling course in the competition. Despite the challenges offered by the East competition, the MTSU team achieved 14th place in endurance (out of 65 teams). When it came to the real racing, MTSU placed higher than several fine engineering schools. Out of the five Tennessee university teams which registered for the competition, MTSU ranked number two.

The Blue Raider Baja team participating in the competition was composed of the following students: David

O'Brien, Jordan Wolpert, Robert McDaniel, Steven Childers, Russel Winfree, and Cody Elliott. The team's faculty advisor, Saeed Foroudestan, would like to thank Rick Taylor for his assistance in the machine shop and support of the team. A special thanks to team captain David O'Brien for his management and supervision.

Mathematical Sciences

Don Hong reported that six students from the spring 2011 ACSI 4140-5140 class passed the Exam-P. They are Brent R. Osantowski, Safder Rizwan Khan, Lianlian Zhou, Yin Le, Taotao Ding, and Yinwei Li.

Physics and Astronomy

Daniel Erenso gave an invited talk for the 2011 Physics Symposium at La Sierra University, Riverside, California, on April 18. The title of his presentation was "Laser Tweezers for Probing the Mechanical Properties of Erythrocytes: From Normal Erythrocytes in Humans to Genetically Corrected Sickle Erythrocytes in Mice."

