Series of events set to observe legacy of Martin Luther King Jr.

Auburn University will host daily events next week from Jan. 20-24 in honor of iconic civil rights leader Martin Luther King Jr.

Classes will be dismissed on Monday for Martin Luther King Jr. Day, which will begin with a scholarship breakfast at The Hotel at Auburn University. The event will feature a keynote address by Isaiah Hugley, city manager of Columbus, Ga. To purchase tickets for the 7 a.m. event, call 844-5042.

The breakfast is sponsored by the National Forum for Black Public Administrators of East Alabama, the Office of the Vice President for University Outreach and Access and Community Initiatives in the Office of Diversity and Multicultural Affairs.

Monday’s events also will include the community-wide day of service, “A Day On and Not a Day Off.” Preregistration is required. To register for the project, call 844-5042.

As part of Auburn’s yearlong celebration of 50 years of integration, the “Honoring the Past, Charting the Future” commemoration and recognition luncheon and forum will be held Tuesday at The Hotel at Auburn University.

Special guests will include some of Auburn’s first African-American students: Harold Franklin, Samuel Pettijohn, Willie Wyatt Jr. and Anthony Lee. A free, public forum beginning at 9:30 a.m. in the auditorium will feature retired U.S. District Judge U.W. Clemon, civil rights attorney Fred Gray, Franklin, Pettijohn, Wyatt and Lee. The forum moderator will be William Leftwich, a principal with LS Strategic Group.

On Wednesday, University Archivist Dwayne Cox will speak as part of the Commemoration Lecture Series. His presentation, “Segregation, Desegregation and the Vestiges of Segregation at Auburn University,” is set for 3 p.m. in Special Collections and Archives at Draughon Library.

Thursday’s event, a Voices of Freedom Interfaith Service, will be at 7 p.m. at The Hotel at Auburn University and will feature various local gospel choirs.

On Friday, for the final scheduled activity, the film “Imitation of Life” will be shown as part of the Auburn University Multicultural Center’s Watch and Learn Series at 2 p.m. in the Student Center, room 1330.

Winter sunset
This winter’s extremely cold temperatures have had one benefit in a series of brilliant sunsets, as seen here looking past Jordan-Hare Stadium and the parking deck in the southwest corner of the Auburn campus.

Online grad programs rank high on new list

Online graduate programs in Auburn University’s College of Education, Raymond J. Harbert College of Business and Samuel Ginn College of Engineering are listed among the top programs nationally in the newly released U.S. News & World Report’s 2014 Best Online Education Programs rankings.

Auburn’s College of Education ranked sixth among online graduate education programs.

“We’re delighted that U.S. News & World Report has recognized the excellence of our students, as well as our faculty’s commitment to providing quality instruction and keeping pace with ever-changing technological tools,” said College of Education Dean Betty Lou Whitford.

She added, “We pride ourselves on bringing out the best in our students, whether they happen to join us on campus or online. Those who choose the latter option due to family or career obligations will find that they will be engaged, challenged and well prepared by our faculty.”

The Raymond J. Harbert College of Business ranked 12th among online graduate business programs. “Our faculty and staff are dedicated to our mission of producing highly desired graduates and generating knowledge that drives business thought and practice,” said Bill Hardgrave, dean of the Raymond J. Harbert College of Business. “This most recent ranking reaffirms our commitment to offering high-quality academic programs and instruction to our graduate students and to ensuring that their experiences will be equally rigorous and rewarding whether they join us on campus or online.”

The Samuel Ginn College of Engineering ranked 29th among online graduate engineering programs.

“Online engineering continues to be recognized for providing one of the nation’s top engineering graduate distance degree programs,” said Chris Roberts, dean of the Samuel Ginn College of Engineering. See Online grad rankings, Page 2.
Veterinarians using 3D printing to assist with surgeries

In Auburn University’s College of Veterinary Medicine, the latest in printing technology is literally going to the dogs, cats and other animals. The Auburn college is among the first veterinary programs in the United States to use three-dimensional printing and models in advance of complicated surgeries.

A 3D printer builds up objects layer by layer, using various methods to deposit and harden the ‘ink’ where it is needed. Many materials, including plastic, metal and ceramic can now be printed based on instructions from computer-assisted design programs.

In the college’s Department of Clinical Sciences, the radiology section has begun using its newly-acquired Makerbot 3D printer to investigate ways to improve surgical planning. In its first week of use, the 3D printer was successfully used to provide a solution for a complicated surgical procedure before the surgery was performed.

“Using the 3D technology proved extremely helpful in planning a surgical procedure for a small dog,” said Dr. Don Sorjonen, a professor emeritus of neurology and neurosurgery who has returned to the college as a consultant.

“In this particular case, a 1.4 kilogram Yorkshire terrier had an instability of the first and second cervical vertebrae,” Sorjonen said. “The joint was not only unstable but also was not aligned properly. Because of the dog’s small size, we did not have the proper implants to make the repair.

After producing a physical model of the dog’s vertebrae using the 3D printer, we could accurately measure the cervical vertebrae and order plates and screws specially suited for the repair. Being able to craft a remedy prior to surgery increased the chances of a successful outcome.”

“Thanks to a computer, we were able to create a 3D model on a screen, but allowing this model to be printed gives us an excellent tool for communicating with our colleagues and clients,” said radiology resident Dr. Adrien-Maxence Hespel.

“The 3D printer allows the surgeons to evaluate more approaches to solve a problem preoperatively and may help them in deciding which solution is optimal for the patient,” Hespel added. “By having a prototype in their hands, surgeons can narrow their choice of surgical implants ahead of time. As the models can be sterilized, they can even be used during surgery as a quick reference.”

The printer also has been used to create an anatomy model to study a bone fracture and conduct an equine research project.

The Makerbot 3D printer was the first technology grant awarded by the college’s Information and Instructional Technology Committee. Hespel applied for the grant, along with Dr. Judith Hudson and Dr. Ronald Montgomery.

Hespel, a native of France and a graduate teaching assistant in the College of Veterinary Medicine, said he had long thought that the ability to recreate objects in 3D would really help the veterinary medicine teaching hospital but it has only recently become available.

Ashley Burt, director of information and instructional technology for the college and a member of the IIT committee, says the printer was the perfect choice for the committee’s first technology grant award.

“The grant program was established to foster innovation in the college that will leverage the world-class facilities that have been and are being built,” Burt said. “Initially this printer is being used to investigate ways of improving surgical planning. However, there are many other teaching opportunities afforded by this technology, and we are hopeful that other faculty members will develop new and innovative applications to aid in our instructional mission.”

– Janet McCoy

Online grad rankings

Continued from Page 1

Engineering. “Innovative graduate instruction with a leading-edge delivery system ensures that our distance students receive an experience comparable to that of their on-campus peers. Our online graduate programs are vital to our overall educational mission, and we are proud to take our place among the finest programs in the country.”

Online graduate degree programs were ranked based on student services and technology, faculty credentials and training, student engagement, admissions selectivity and academic peer reputation. Only programs in which all the required coursework could be completed via distance education were considered for the rankings. U.S. News established rankings for each online master’s degree program in education, engineering, business, nursing and computer information technology.

The U.S. News & World Report’s Best Online Education Program rankings are available online at www.usnews.com/education/online-education.

– Charles Martin

Returning students

In a rare scene for Auburn, students returning for spring semester have been forced by bitterly cold weather to bundle up as if they were in a more northern climate.

– Melissa Humble, Photographic Services
Gift from energy companies

Nuclear reactor fuel assembly model set up in Engineering

Auburn University’s Samuel Ginn College of Engineering recently received a nuclear reactor fuel assembly model from the global energy conglomerate AREVA and the Tennessee Valley Authority. The model, which was manufactured at AREVA’s Fuel Fabrication Plant in Richland, Wash., will be used to teach students in the Alabama Power Nuclear Power Generation Systems Program.

The model represents an actual production fuel assembly that is 13.3 feet tall and 8.4 inches wide, weighing approximately 1,500 pounds. One fuel assembly of these dimensions contains enough energy to power more than 17,000 homes annually.

“This detailed fuel assembly model will be a key learning tool for our engineering students in the areas of fission, reactor materials and fluid flow within the core,” said Bill Goodwin, program director. “We are extremely grateful for AREVA and TVA’s provision of a model that gives our students a unique view of what occurs inside a reactor.”

In addition to industry basics such as reactor operations and power plant models, students enrolled in the program explore the challenges of nuclear power generation, including safety issues, engineering and construction practices and systems operation and maintenance.

“AREVA and TVA are helping to elevate our nuclear power generation systems minor to the next level,” said Chris Roberts, dean of engineering. “This fuel assembly model will play a key role in our students’ hands-on lab experiences, and will ultimately benefit the next generation of nuclear power operators in the U.S.”

AREVA is a French public multinational industrial conglomerate headquartered in Paris. With nearly 5,000 employees, AREVA, North America is the leading nuclear energy supplier in the U.S., and has a presence in the Canadian market as well. It is the only company with expertise in all phases of nuclear power generation, from uranium mining and reactor construction to fuel fabrication and recycling used fuel and is a growing player in the renewable energy market.

TVA, a sponsor of the Alabama Power Nuclear Power Generation Systems Program, provides electricity to nearly nine million people in areas of seven southeastern states, as well as flood control, navigation and land management for the Tennessee River system. It also assists utilities and state and local governments with economic development.

Campus News Briefs

Provost open forum Jan. 15 focuses on budget initiatives

As part of Auburn’s strategic budgeting initiative, the Provost’s Office will hold an open forum and panel discussion for the campus community Wednesday, Jan. 15, at 3:30 p.m. in Ballroom B at The Hotel at Auburn University.

Featured panelists will be academic and administrative leaders from four peer universities that have undertaken similar budget review processes. The forum will be an opportunity for faculty and staff to hear and ask questions about the panelists’ experiences.

Morris named head of Procurement and Payment Services

The Business Office has announced the promotion of Melissa Morris to executive director of the Department of Procurement and Payment Services.

Morris has served as associate director in the department for the past 10 years and prior to that time, served as assistant director of Accounts Payable and as an accountant in Contracts and Grants Accounting.

Before coming to Auburn in 1993, Morris was an internal auditor in the banking industry. Deby Miller, previously the manager of Accounting, will assume the role of assistant director of Payment Services and Missty Kennedy, previously the manager of Procurement, will assume the role of assistant director of procurement.

Adult Education Program receives Curriculum Improvement Award

The Commission of Professors of Adult Education recently awarded its Curriculum Innovation Award to the Auburn University Adult Education Program and faculty members James Witte, Maria Witte and Leslie Cordie.

The award, presented once every two years, recognizes innovative approaches to adult education. Receiving the award requires a demonstration of evidence of innovative work within conventional courses and innovative delivery of the overall curriculum in adult education preparation programs.

“To be recognized by peers is always valued, but to have the entire program recognized is especially significant,” said James Witte, the Adult Education Program coordinator.

The commission is part of the American Association for Adult and Continuing Education and Works Act as a vehicle for strengthening and supporting excellence in academic programs in adult education.

Chemistry and Biological Sciences graduate programs ranked in top 25 by website

The website GraduatePrograms.com has ranked Auburn’s College of Sciences and Mathematics’ graduate programs in chemistry and biological sciences among the top 25 in the nation.

The chemistry graduate program was ranked fifth nationally, and the biological sciences graduate program was ranked 25th. GraduatePrograms.com is an organization which strives to provide helpful information to prospective graduate students through peer-written ratings and reviews.

Program rankings, compiled using data gathered between Sept. 1, 2012, and Sept. 30, 2013, encompass reviews posted by more than 40,000 students participating in more than 1,300 graduate programs nationwide. Students were asked to evaluate their graduate school experience in a variety of areas, including academic competitiveness, affordability, education quality and social life.

Clark and DeRuiter receive grant from U.S. Department of Justice

Randall Clark and Jack DeRuiter, professors in the Department of Drug Discovery and Development in Auburn’s Harrison School of Pharmacy, have been awarded a $344,000 grant from the U.S. Department of Justice, Office of Justice Programs, National Institute of Justice, to study the development of designer drugs.

The 18-month project is titled “Bath Salt-Type Amphetamine Designer Drugs: Analytical and Synthetic Studies on Substituted Cathinones.”

“Bath salts” is a term used to describe designer drugs which often contain cathinones, which have effects similar to amphetamine and cocaine. The name derives from cases in which the drugs – which have crystals resembling Epsom salts – are sold under the guise of being bath salts.

Bozack receives grant from Department of Defense for study of solder alloys

Physics Professor Michael Bozack in the College of Sciences and Mathematics has received a grant from the U.S. Department of Defense for research addressing the reliability of certain lead-free solder alloys under harsh environmental conditions.

The work follows a successful global effort to develop alternative, environmentally friendly materials for electronics packaging. The grant from the U.S. Department of Defense will provide Bozack and a team of Auburn University scientists with more than $2 million to run tests that fully explore solutions to the solder joint reliability problem.