At the University of Alabama, we believe a college education has a critical role to play in preparing students to serve as effective, engaged and ethical citizens. Through a vast and varied array of service-learning courses, students at the Capstone have opportunities to develop not only career skills but also the ability and desire to take responsibility for the larger community.

Service learning is an educational experience that combines organized service activities with academic study and thoughtful reflection to enhance learning of course content and foster a sense of civic responsibility. These service activities, carried out in conjunction with community partners, often provide students with practical experience in their chosen fields. Service-learning projects also encourage students to move beyond acts of charity and temporary solutions to a deeper analysis of systemic challenges facing communities—making the values and skills of citizenship a hallmark of a University of Alabama education.

The University of Alabama is committed to positively touching lives within our state and across the globe, and this mission—embraced by students, faculty, staff, alumni and administrators—has become part of our culture. That fact was never more apparent than in the days following April 27, 2011, when a nearly mile-wide tornado ripped a path of destruction through Tuscaloosa, claiming the lives of 52 people, including six UA students. The scenes of devastation were shocking and overwhelming. But the UA community instinctively leapt to action, as you’ll read in the disaster-relief section of this issue (page 24). Faculty members were quick to develop and adapt service-learning courses through which students are playing key roles in relief and recovery efforts—endeavors that will continue for several years.

This publication highlights just some of the many outstanding projects and initiatives arising from service learning at The University of Alabama. In the 2010-2011 academic year, 120 faculty members—representing almost every academic discipline—offered service-learning courses in collaboration with more than 120 community partners. From engineering students developing the next generation of prosthetic limbs (page 22) and computer-science students building websites for nonprofit organizations (page 56) to business students helping Bangladesh villagers become entrepreneurs (page 12) and honors students preparing at-risk high schoolers to succeed in Advanced Placement courses (page 58), service-learning experiences move students beyond the classroom as they apply their knowledge to solving real-world problems and begin to shape the future of our state, country and world.

Stephen F. Black, Director
Center for Ethics & Social Responsibility
A Division of Academic Affairs

THE UNIVERSITY OF ALABAMA
SERVICE LEARNING 2011-2012

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Elizabeth Williams isn’t the stereotypical computer-science major. She bubbles with enthusiasm as she interacts with children at Cottondale Elementary School and is the antithesis of the introverted computer programmer working in a dark, isolated cubicle. It’s exactly the scenario Nicholas Kraft hoped for when he added a service-learning component to his computer Programming II course at The University of Alabama.

Students in the course now spend two hours per week at Cottondale Elementary, a short drive from the UA campus, teaching fourth graders in an after-school program to learn and study using computers, create graphic-design projects, play logic games that relate to computer programming and help write a computer program. The mentoring sessions culminate each semester with the kids building their own computers from raw parts.

The experience gives college students an understanding of the ties between the fundamental aspects of their discipline and popular culture and modern society, Kraft said, and allows them to see what they’re doing is interesting, useful and helpful. The computer-programming field is “not just sitting in a lab or working the cubicle,” said Kraft, assistant professor of computer science. “You can have an impact on society, not just some product. College students influence these kids’ lives.”

Williams, a junior, said she was initially surprised at how engaged the children were and how well they stuck to tasks and paid attention. “Because computer science is something I love, getting kids interested in it and passing that on to them is really rewarding,” Williams said.

For the children, many of whom are at risk of academic failure, the class is an opportunity to view computers in a new light. Most have used computers before, but typically to play games instead of to learn, Kraft said. One activity college students and kids do together is using Google Earth to visit past Olympic sites and learn about those cities. This also benefits UA students. Kraft said seeing that everyone doesn’t know how to use Google Earth or other software programs helps his students keep their target audience in mind — something that’s often a challenge.

Vicky Fason, a fourth-grade and after-school-program teacher at Cottondale Elementary, said the kids look forward to the computer class all week, and it has instilled confidence in them. “A lot of these kids don’t have access to technology outside of school,” she said. “In this day and age, technology is going to be such a large part of their lives and careers, so it’s neat for them to be able to see how what they’re using is put together — to actually see where this technology comes from.”

Chris Crawford, a junior majoring in computer science, said he enjoyed seeing how kids who hadn’t used computers much in general reacted to putting one together. After kids assemble the components in small cardboard boxes, UA students help connect them to monitors and keyboards and then to the Internet.

“It was fun,” said fourth grader Jessica Boyd, “it was like a puzzle — except we didn’t know how to do it at first.” Her favorite part was “when we finally got the computers together and got to play on them.”

In 2010, Kraft earned a National Science Foundation grant to help sustain and expand the service-learning program, which included more than 50 UA students during the 2010-2011 academic year. Using grant funds, he purchased additional netbooks the college students use when working with the elementary students, bringing the total from four to 20. He and previous CS 250 students also are developing additional college-student assignments that can be integrated into lessons with fourth graders. For example, during the 2010-2011 school year, UA students wrote a program that allows kids to generate computer graphics, designs, patterns and shapes, and Kraft utilized the NSF grant to purchase a 44-inch poster printer that gives them a tangible version of their work.

To learn more about the service-learning section of CS 250 Programming II, contact Nicholas Kraft at 205-348-4740 or nkraft@ua.edu.
HY 300 Religion and Civil Rights students learn about the struggle for racial equality in West Alabama by recording church members’ personal stories

For students in John Giggie’s Religion and Civil Rights course, America’s civil rights movement isn’t a closed chapter in history accessible only through books. It has names, faces and voices alive with relevant messages for today’s society and in urgent need of recording.

As part of the course, which surveys the interaction of religion and the push for racial equality in the mid-1900s, students interview congregants of local black churches in order to document their personal stories as well as the churches’ involvement in the civil rights movement. Students record their conversations with church members and transcribe them for inclusion in a book they create profiling each church’s history.

Nancy Johnson, a senior public relations/history major, said she knew a lot about the civil rights movement, having grown up near Montgomery, Ala., where she was immersed in its legacy. However, the full magnitude of the struggle didn’t hit home until hearing Ethel Thomas tell how her back still hurts due to injuries sustained in 1964 during Tuscaloosa’s “Bloody Tuesday,” in which police and Klan members shot tear gas into First African Baptist Church and clubbed people on the church steps. “That really did it for me,” Johnson said. “It was real.”

The attack on protestors who had gathered at the church planning to march to the county courthouse sent 33 black men, women and children to the hospital and was comparable to the 1965 “Bloody Sunday” riot in Selma, Ala., but was not widely reported due to the absence of national news media.

While nationwide in scope, the course emphasizes the role of Alabama and particularly Tuscaloosa in the civil rights movement. “I wanted to create a different kind of class that involved not only reading and writing but working with members of the community to preserve civil rights history in West Alabama,” Giggie said.

Both Johnson and Joe Tanner, a senior majoring in education, said much of the civil rights history in their own backyards came as a surprise to them. When people think of the civil rights movement, they don’t think Tuscaloosa, Johnson said, but “it was a battleground,” Tanner added. “It’s important for this community to know that. You don’t see this on the History Channel.”

Many civil rights “foot soldiers” don’t realize the magnitude of their actions or the knowledge they hold, Tanner said. Prior to interviews, they’ll say they were insignificant and don’t have much to share, but students will talk to them for hours and discover they did remarkable things.

“Getting the opportunity to sit down and talk with people who were involved in such a crucial part of history and recording these small stories that shaped people’s lives means so much,” said Tanner, who was in the inaugural 2009 class, worked on the oral history project as an independent study during the 2011-2012 academic year.

In addition to interviews, the books students produce contain: articles about the churches and members’ arrest records during the civil rights era; census data, organized into graphs, including members’ family size, literacy rates and professions; and digital versions of ledgers and meeting notes. Thirty students have completed the course, creating books for First African Baptist Church and Hunter Chapel African Methodist Episcopal Zion Church, and 18 are enrolled in Fall 2011. During the 2011-2012 academic year, students are building an online database to serve as a free resource for anyone interested in civil rights history in West Alabama. Giggie also hopes the project will expand to include documentation of other groups’ struggles for equality. “This idea is to be used as a model for how to capture and catalog the stories of people who battle for full citizenship rights,” he said.

To learn more about HY 300 Religion and Civil Rights, contact John Giggie at jmgiggie@as.ua.edu or 205-348-7100.
University of Alabama students have provided free high-tech vision screenings to more than 110,000 Alabama children through FocusFirst, a collaboration between the UA Center for Ethics & Social Responsibility and Impact Alabama.

Students receive academic credit for their work with FocusFirst through numerous service-learning courses across disciplines.

“There are two sides to FocusFirst,” said Stephen Black, director of the Center for Ethics & Social Responsibility and Impact Alabama founder. “We wanted to figure out a way to make a positive impact on the community and also get college students involved. Many students take for granted the ability to see a doctor regularly.”

As part of a statewide, campus-based effort, undergraduate and graduate students serving as FocusFirst volunteers ensure children ages 6 months to 5 years in Head Starts and low-income daycares are screened for vision problems.

FocusFirst partner Sight Savers America, a nonprofit dedicated to improving eye care among children, provides free or subsidized follow-up care.

Poor vision adversely affects tens of thousands of Alabama children each year, due largely to poor public awareness about the importance of eye care in young children and the inability of children to recognize their own vision impairment. These problems are heightened in families suffering from financial hardship and lack of access to appropriate medical care. Left untreated, poor vision can contribute to impaired educational performance, low self-esteem and behavioral problems.

In Fall 2010, junior Maggie Gray led a group of UA honors students on a series of FocusFirst screenings in her hometown of Decatur, Ala. They screened approximately 224 pre-K students at seven schools over three days.

“My senior year of high school, I worked as a tutor at an at-risk elementary school and saw the needs of these children firsthand,” said Gray, a pre-med student majoring in Spanish. “Being able to return to this school and help these children proved very fulfilling.”

While vision screenings are most effective during the preschool years, when early treatment of many conditions can prevent irreversible vision damage or loss, only 21 percent of preschool children receive comprehensive vision screenings.

Since the launch of the FocusFirst program in November 2004, more than 1,700 student volunteers from 20 campuses throughout Alabama have screened more than 130,000 children.

To learn more about FocusFirst, visit cesr.ua.edu.
For the past two summers, UA instructor Rashmee Sharif has led groups of students to Bangladesh in collaboration with the Grameen Bank basic training program, which teaches students how small loans to the poor can alleviate poverty in developing countries by providing citizens resources to create self-sustaining businesses. While in Bangladesh, students follow the bank’s branch managers, interview locals, disburse loans and collect payments.

“I’m interested in corporate responsibility, so I was interested in seeing how these social businesses help the community while running a for-profit business,” said MBA student Tyler Morgan. “As a finance undergrad, we talked about complicated financial scenarios. But what’s interesting is that Grameen is such a simplistic banking system. The borrowers own the bank, and this simple system is what brings these people up.”

Started in 1976 by economics professor Muhammad Yunus, Grameen Bank’s system is both self-sustaining and community-building. Individuals, usually women, in rural Bangladesh come up with business ideas that typically employ skills such as sewing, weaving, farming and ranching. Once an individual decides to take part in the Grameen Bank program, he or she must find four other villagers to participate. Each group member’s ability to secure a loan is reliant on the other group members’ repayments of their loans, encouraging the newly established business owners to work together. All loans are disbursed without collateral and are repaid on a weekly basis in small increments. Yunus and Grameen Bank won the Nobel Peace Prize in 2006.

For UA students and anyone who participates in the basic training program, the goal is to foster knowledge and equip them to replicate the Grameen model in another part of the world. Fourteen UA undergraduate and graduate students across disciplines including business, film, law, criminal justice, political science, anthropology and education have travelled to Bangladesh for the three-week program. As part of their UA studies, they also read three books, Yunus’ “Banker to the Poor” and “Building Social Business” as well as Lonely Planet’s “Bangladesh” country guide, earning three hours of New College or American Studies credit.

Third-year doctoral student Ben Woodruff said the Grameen Bank program allowed him to learn about real-world applications for his research, which focuses on microcredit. “I saw a lot of potential in my discipline to help Bangladesh and other developing countries,” Woodruff said. “It left with several research ideas.”

Sharif said a lot of students have told her they want to go back to Bangladesh.

“It’s a very concentrated experience, but it’s also a very powerful experience,” said Sharif, who has friends, cousins, aunts and uncles living in Bangladesh. “I wanted each student to come away with a different perspective of the world. Going to a place like Bangladesh really shakes your paradigm. I expect it will stay with them for a long time.”

A video about the UA in Bangladesh program won the GoAbroad Innovation Award for best student video in 2011. The video consists of student photos from the 2010 trip and a video clip from a Bangladesh school. Winners were announced June 2 during the GoAbroad reception in Vancouver, British Columbia, and were chosen by the public via online voting.

Tyler Morgan, who participated in the 2010 Bangladesh program as an MBA student, provided many photos featured in the video, and George Guarino, a Capstone international graduate assistant, produced the video.

“I was thrilled that we won because it gives more attention to the program. It helps keep it sustained,” Morgan said. See the video and learn more about the program at http://international.ua.edu/programs/newsite/bangladesh-grameen-bank/.
**EVERY MOVE COUNTS**

**Students in UH 333 chess in education course learn the academic and social benefits the game holds for children while teaching it in schools.**

Visitors to Tuscaloosa Magnet Elementary School are regularly amazed at the scene: more than 20 first and second graders gathered around chess boards, carefully planning moves in the age-old game and clearly enjoying themselves. At each board, a college-student coach looks on, providing guidance, encouragement and a quick smile.

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**Every Move Counts: A Chess in Education Project, a nationally unique, rapidly growing service-learning initiative of the Center for Ethics & Social Responsibility. In addition to reading and discussing the academic and social benefits of chess and its role in education reform, UA students develop lesson plans and spend one to three hours each week teaching chess to children in schools.**

“Through the game of chess, my brother shared his passion for logic and critical thinking with me at a very early age,” said Matt Tucker, a senior biology major who participated in the inaugural semester of the course and now helps lead the initiative. “Every Move Counts gives me the opportunity to share the same passion with truly outstanding kids. Watching them, it’s easy to see how much they enjoy playing the game. But it’s when they get quiet and focus on the board that I know we’ve accomplished something.”

The program has grown exponentially since Spring 2010, when it began with three UA students teaching chess to 12 sixth graders. In Fall 2011, 25 students are teaching chess to approximately 220 students at an elementary school, middle school and high school. At the principal’s request, all children at Tuscaloosa Magnet Elementary School are learning to play the game. “I am completely sold on chess integrated into the school day now,” said principal Jeanne Burkhalter, citing the game’s role in improving math and logic skills.

Extensive educational research shows chess improves not only math and reasoning abilities, but also reading and English scores, critical thinking and concentration skills, general intelligence, self-esteem and self-control. Since gender, ethnic background and socioeconomic status are irrelevant to the game, chess brings together diverse groups of children, helping them build friendships they might not have formed otherwise, said Dr. Rose Marie Stuts, educational director for Freedom Chess Academy, a small nonprofit offering free chess lessons, and a consultant for the Every Move Counts program.

Christian Smith, a junior finance major who taught first and second graders, said he realized through the experience how quickly young minds can learn. “In class we would read material on the effects chess lessons can have on children and we could witness some of the results weekly,” Smith said. “Characteristics such as sportsmanship, analytical thinking, competitiveness and thinking out one’s decisions would be reflected in my students.”

Matthew Stutts, a junior history major, added, “Children in the chess program have learned the value of hard work and are now willing to put in a lot of effort to achieve their goals. They have also learned the value of working in a team and how to deal with challenges and setbacks.”

“Every Move Counts gives me the opportunity to share the same passion with truly outstanding kids. Watching them, it’s easy to see how much they enjoy playing the game. But it’s when they get quiet and focus on the board that I know we’ve accomplished something.”

In the United States, chess as an educational tool has not achieved the status it holds in other countries. Nearly 30 nations around the world include chess in their education systems, and the International Olympic Committee recognizes chess as a sport. Recently, education communities in the United States have begun to recognize the academic benefits of chess, and a growing number of states are including it in their curricula.

“Chess club helped improve my sportsmanship in P.E. and other games,” says Maya Samuels-Fair, a student at Tuscaloosa Magnet Middle School. “It is also a fun thing to do with my dad on the weekends. Sometimes I even beat him!”

Maya’s mother, Tana Samuels-Fair, said chess class is the highlight of Maya’s week. “It’s her favorite thing,” Samuels-Fair said. “It’s really helped her with strategy skills. She’s absorbed everything the UA students have taught her.”

Kristi Thomson, principal of Tuscaloosa Magnet Middle School, sees many benefits for her students, including the chance to witness acts of service by UA students. “The children learn to give back to the community as they observe volunteers from UA sharing their talents and time with the school,” Thomson said.

To learn more about Every Move Counts, visit cesr.ua.edu or contact the Center for Ethics and Social Responsibility at cesr@ua.edu or 205-348-6493.

**WHY CHESS?**

In the United States, chess as an educational tool has not achieved the status it holds in other countries. Nearly 30 nations around the world include chess in their education systems, and the International Olympic Committee recognizes chess as a sport. Recently, education communities in the United States have begun to recognize the academic benefits of chess, and a growing number of states are including it in their curricula.

“This is one of the first programs of its kind in the country, and we’re excited about its potential,” Stephen Black, director of the Center for Ethics & Social Responsibility, said of the Every Move Counts program. “Chess is increasingly popular among college students, and the proven educational benefits of the game for school-age children are remarkable.

Bringing these two groups together provides advantages for both: through mentoring young chess players, college students establish a tie with the community while teaching a game they enjoy, and children have fun while reaping educational and social rewards.”
In Spring 2009, UA advertising students competed nationally to pitch an anti-binge-drinking campaign to the nonprofit organization The Century Council, which focuses on reducing underage drinking and drunk driving. Alabama’s LessThanUThink campaign finished second by one-tenth of a point, and less than a year later The Century Council offered a 15-member advertising and public-relations team a $75,000 grant to implement the campaign on the UA campus.

The team learned through surveys students were more concerned with social faux pas associated with drinking than with health consequences, and they used that knowledge as a starting point for their campaign. They hosted an alcohol-free tailgate party, a health and wellness fair and a “happy hour” event to educate students about weight gain associated with binge drinking. The team used guerrilla marketing tactics including scattering 4,000 neon-colored stress balls on the Quad and holding a flash mob in the Ferguson Student Center. They also visited bars during trivia nights to hand out T-shirts and other LTUT promotion items and held a photo contest that prompted students to post more than 2,400 photos of themselves with LTUT gear on Facebook.

Before the campaign, only 7 percent of students correctly identified the definition of binge drinking. After the campaign, 29.5 percent identified the definition, with 42.7 percent of those students saying they knew it as a result of LessThanUThink.

Faculty advisor Teri Henley said one of the campaign’s best features is that it can be reused on other campuses. “We’re working on a proposal to do a spring break promotion of the campaign across Alabama, and schools in Kentucky and Georgia have requested to use the campaign model,” Henley said. “That’s exactly what we want.”

In spring 2010, 18 UA students embarked on a campaign encouraging all Alabamians to read the same book — Mark Twain’s “The Adventures of Tom Sawyer” — as part of Alabama Reads, a campaign funded by the National Endowment for the Arts to increase library usage and literacy rates. The project produced approximately $250,000 of media coverage.

Students wrote press releases and built websites, served as consultants to librarians and designed logos, posters, and advertisements.

Based on The Big Read — a national reading campaign — Alabama Reads took an initiative usually sponsored by individual libraries and turned it into a successful statewide effort. Alabama Reads was featured in The Birmingham News editorial section multiple times. “This type of PR is priceless,” said Patricia Ryan, executive director of the Jefferson County Library Cooperative. “Public libraries became part of the media culture. A definite buzz was created statewide.”

Lizzie Yarbrough, a recent graduate of the APR master’s program, said the practical experience she gained was invaluable. “Most students compete in a contest, but clients never use their work,” Yarbrough said. “I gained real experience with a real client. I don’t just have press releases that I wrote; I have press releases that got covered.”

The LessThanUThink and Alabama Reads public-awareness campaigns would make any big-name advertising agency proud. But UA public-relations and advertising students developed and implemented the campaigns as part of two 2010-2011 service-learning courses. LessThanUThink, a campaign against binge drinking, won more than 25 local, regional and national awards, and Alabama Reads, a literacy campaign, partnered with nearly 200 libraries across the state and generated a quarter-million dollars worth of media coverage about the libraries and their activities.

“When I show people what I’ve done, everyone is so amazed that students did it,” said Allison Cook, who worked on the LessThanUThink campaign and recently graduated with a PR degree. “I learned how to run a campaign, but I also made a difference on campus.”

In Spring 2009, UA advertising students competed nationally to pitch an anti-binge-drinking campaign to the nonprofit organization The Century Council, which focuses on reducing underage drinking and drunk driving.
the federal government’s largest anti-poverty program supporting low- to moderate-income working families. The EITC reduces the tax burden on low-income workers and provides an incentive for individuals, especially single mothers, to find work.

The Poverty in America course centers on some of the most engaging contemporary scholarship on issues of poverty, including perceptions and misperceptions of race and poverty and policies aimed at assisting the working poor.

“The SaveFirst service-learning initiative cultivates a willingness and desire in students to take responsibility for the well-being and progress of the larger community – empowering them to critically think about the structural causes of the need for their service and take leadership roles to develop innovative solutions to them,” said Stephen Black, director of the Center for Ethics & Social Responsibility and SaveFirst Poverty in America instructor.

In its fifth year, SaveFirst is the largest volunteer tax-preparation program serving Earned Income Tax Credit families in Alabama, and the largest campus-based free tax-preparation initiative in the nation. In 2011, 180 UA students (41 of whom enrolled in the Poverty in America course) assisted in preparing taxes at 15 sites across the state, helping more than 3,000 families claim more than $6 million in refunds in just six weeks. The students’ service helped these families save nearly $850,000 in commercial-tax-preparation fees.

More than 492,000 working families in Alabama annually claim the EITC, representing a $1 billion investment for the state. However, an estimated $133 million in EITC dollars are unclaimed by families who are eligible for the credit but do not know to claim it. Moreover, 75 percent of Alabama’s EITC recipients pay an average of $200 to commercial tax preparers just to access this benefit. They often take out predatory refund-anticipation loans as well, at annual percentage rates of up to 800 percent, further eroding EITC benefits. Alabama families lose $77 million to commercial tax preparers through fees and refund-anticipation loans. That extra $77 million could help low-income families secure health insurance, pay down debts or put food on the table.

UA students participating in SaveFirst in 2011 collaborated with more than 300 students from 11 other campuses statewide. In total, SaveFirst volunteers prepared returns for more than 3,500 working families – helping them claim $7 million in refunds and saving them approximately $1 million in commercial-tax-preparation fees and refund anticipation loan costs. SaveFirst is a collaborative effort among more than 150 community-based organizations throughout Alabama, including universities, mayors’ offices in each city where SaveFirst operates, school systems, churches and nonprofits.

To learn more about SaveFirst, see cesr.ua.edu or contact Heather Christensen at hchristensen@uah.edu or 205-348-6495.
In Spring 2011, 25 UA students mentored 30 fourth and fifth graders in Crestmont Elementary’s after-school program, teaching children how to research topics and speak confidently in public. The program culminated with a debate tournament in which kids argued the pros and cons of allowing cell phones in schools.

By teaching the subject they are learning in class, UA students better understand their own studies. “We had a debate at the end of our class as well,” said Gerald Jenkins, a junior majoring in public relations. “Teaching those students, you try to make sure you cover everything, and you learn more yourself.”

Ryan Murphy, a senior majoring in communication studies, said teaching debate offers UA students an opportunity to learn the subject from multiple angles. “We would learn about argumentation one way during class, and then we had to teach it in a different way for younger students to understand it,” he said.

To encourage the kids to practice, UA students asked them to use what they learned during mentoring sessions to form basic arguments with their family members, communicating their opinions through carefully constructed cases. After learning the basics, Crestmont students spent four weeks preparing for the tournament.

Treva Dean, course instructor, said UA students study types and tests of evidence, how to prepare and adapt cases to specific audiences and use argumentation as an inquiry method important to civic engagement. But she also has another objective for her students: to connect them with the community.

“The focus is on being critical consumers of the arguments we hear on a day-to-day basis, but I also wanted to increase their awareness of what’s going on in their community,” said Dean, who led a similar service-learning course with UH 101 students in spring 2010 at Hillcrest Middle School, where UA students worked with about 30 kids. “After taking this course and interacting with children classified as high-risk and low-income, I hope my students will become more community-conscious and advocate for education.”

Murphy said being a role model for the kids was the most important part of the class. “It’s about us being there for them and helping them feel like they’re not alone,” he said.

COM 348 is offered each spring. To learn more about the course, contact Treva Dean at treva.dean@ua.edu or 205-348-5995.
Andrew Magee was looking for a Computer-Based Honors research project when, on the first day of a mechanical engineering class, the professor showed a video of a prosthetic arm he had created and told students he needed assistants to help design a similar artificial limb. “I liked the idea of applying engineering concepts to something more biological,” Magee said, so he signed up. During Spring 2010, Magee, then a junior, spent five to 10 hours per week in UA’s Bio-Robotics Lab, designing an elbow joint and actuator for an electric-motor-powered arm prosthesis. “It was the first time I had a chance to apply classroom knowledge to a real design problem, so it gave me a better idea of how the concepts are actually put into practice,” said Magee, who is now pursuing a master’s degree in mechanical engineering at UA. “I also enjoyed thinking about how classroom concepts could be used to actually make a meaningful improvement to someone’s quality of life.”

Undergraduate and graduate students are earning academic credit working in the Bio-Robotics Lab under the leadership of Xiangrong Shen, assistant professor of mechanical engineering. Their current project is building a robotic actuator that functions and feels like human muscle. Modern robotic prostheses are capable of sensing, computing and moving, but they do not have the flexibility of human muscle. Development of flexible, powerful artificial limbs could significantly improve the lives of approximately 1.7 million people the Amputee Coalition of America estimates live with limb loss in the United States.

For a leg prosthesis, Shen’s team is working on a technology called chemo-fluidic artificial muscle, which utilizes pneumatic power. Current leg prostheses can only dissipate energy or store and reuse energy within a gait cycle. The inability to deliver significant power impairs the artificial leg’s performance — especially during activities such as walking up stairs or running. In comparison, the chemo-fluidic-artificial-muscle technology offers superior energy and power density.

Tad Driver, a mechanical engineering doctoral student, said the project was a turning point in his academic career. “You quickly learn that actual systems don’t behave like the theoretical systems used in class,” Driver said. “You have to learn to adapt and be patient because a lot of things you try may not work or may need a lot of tuning.”

Jill Hershman, a senior majoring in mechanical engineering who researched and built a circuit to read and amplify electrical signals produced by upper-leg muscles, said the experience allowed her to explore her interest in bio-medical engineering, a field she now plans to pursue after graduating. “While traditional classroom learning gives a broad and general overview, this experience allowed me to learn about the subject more in-depth,” she said.

Like Magee, Hershman earned credit for her work on the project through the Computer-Based Honors Program, an undergraduate research initiative that allows students to apply research skills and computing technology to their fields of interest. They spend an initial year learning computer programming, then, for at least four semesters, are involved in faculty members’ research.

In Fall 2011, the artificial-muscle prosthetic leg project was in the second of three phases, with students working to create a two-degree-of-freedom knee and ankle version. A person with above-knee amputation will test the prosthetic once that prototype is developed.

“To see someone actually using the prosthetic in everyday life will be incredible,” Driver said. To learn more about the Bio-Robotics Lab, contact Xiangrong Shen at xshen@eng.ua.edu or 205-348-6743.
On April 27, 2011, one of the most devastating storm systems in U.S. history descended on the Southeast, and Alabama bore the brunt of its destruction. Tuscaloosa took a direct hit from a nearly mile-wide EF-4 tornado that cut a 6-mile gash through the heart of the city, narrowly skirting the University of Alabama campus.

As the winds subsided, the UA community – students, faculty, staff and alumni – sprang to action, playing a vital role in rescue and relief efforts. They have been working tirelessly since, many through specially designed service-learning courses, in recovery efforts aimed not only at restoring Tuscaloosa and other Alabama communities, but at building them back better than before. The photos of immediate actions and stories of organized efforts chronicled here are just a sampling of the UA community’s countless acts of compassion, selflessness, determination and innovation in the face of disaster.
Immediately after the storm, many UA students checked on their neighbors, UA football coach Nick Saban addresses volunteers constructing a Habitat for Humanity house through a partnership with his Nick’s Kids Fund and Project Team Up (more about PTU on page 48).

The six-member student Public Affairs Team communicated the Red Cross chapter’s efforts to aid tornado survivors. The team shared stories of those impacted and those helping through a variety of channels including writing news releases, taking digital photos and videos and monitoring and updating social media. The students launched a blog to post stories about volunteers, clients and relief efforts. The group also helped spread the word about volunteer opportunities and fundraising events.

Each week, the team broke into smaller groups to take on specific projects. “We get assigned stories of interest around Tuscaloosa that directly affect what the Red Cross does that sometimes goes unnoticed,” said Brailyn Hardy, a senior advertising and public relations major. “I feel honored to have my talents are much more useful in this position.”

The Public Affairs Team volunteered with the Red Cross throughout the summer and into the fall semester. Mashburn said she plans to volunteer with the Red Cross throughout her life. “The April 27 tornado has brought a lot of pain, but has also caused our community’s true heroes to surface,” she said. “I feel honored to have been able to work with some of them.”

To learn more about the work of the American Red Cross of West Alabama and the Public Affairs Team, visit www.facebook.com/bamaredcross or www.alredcross.org. See the students’ work at redcrossofwestalabama.wordpress.com.

“I have gained a huge appreciation for Tuscaloosa city officials and large organizations such as the Red Cross and the Salvation Army,” said Alex Mashburn, a senior public relations major. “The rebuilding of Tuscaloosa would be impossible without the work of the volunteers. It is comforting to know that there are still so many good and selfless people in the world.”

One such volunteer is Lindsay Malone, who is from Michigan and graduated with a master’s degree in advertising and public relations in August. “I returned to Michigan for a week after the storm and felt like I had abandoned my city,” she said. “When this opportunity came along it was a perfect match for me. I would have been more than willing to learn how to use a chainsaw and help remove debris, but I felt like my talents are much more useful in this position.”

The team also worked with the Red Cross Public Affairs Team to communicate the work of the volunteers. It is comforting to know that there are still so many good and selfless people in the world.”

They were members of the Red Cross Public Affairs Team.

To learn more about the work of the American Red Cross of West Alabama and the Public Affairs Team, visit www.facebook.com/redcrossofwestalabama or www.alredcross.org.

See the students’ work at redcrossofwestalabama.wordpress.com.

Statistics provided by the city of Tuscaloosa:

- Lives lost: 53
- People injured: 1,200
- Portion of city destroyed: 12%
- People left unemployed: 7,000
- Homes damaged/destroyed in Tuscaloosa County: 7,200
- Portion of Tuscaloosa city’s housing lost: 1/6
- Damage cost estimate for Tuscaloosa County: $2 billion
- Trees lost: 5,000

Tuscaloosa Tornado’s Toll

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Statistics provided by the city of Tuscaloosa
A group of 25 honors students had spent four months planning service projects for an annual program in Alabama’s economically challenged Black Belt region when the April 27 tornado ripped through Tuscaloosa, causing them to rethink their plans.

“The day after the tornado, we were wrestling with our long-term commitment to Marion [Ala.] and responding to a community in immediate need,” said Wellon Bridgers, coordinator of the University Fellows Experience, a four-year program for honors students dedicated to servant leadership. One component of the program is a service-learning course in which freshmen develop community-service projects during the spring semester and implement them during the May interim term.

Emily Broman, a chemical engineering and psychology major, said the Fellows soon reached a consensus. “We knew we had to come back to Tuscaloosa,” Broman said. One thing Fellows try to practice is the art of adapting and being where they’re needed most, she noted, and that played into the decision. (See the sidebar on following page for more on how University Fellows continued their commitments in the Black Belt.)

Students reassembled in Tuscaloosa and began researching relief efforts and identifying areas where they could be most helpful. During the first week of the three-week Fellows Experience, which took place May 9-27, students rotated through multiple relief organizations to gain a better understanding of the community’s needs. For the next two weeks, Fellows devoted themselves to specific relief efforts including planning, organizing and implementing significant portions of the following projects.

TUSCALOOSA’S VOLUNTEER RECEPTION CENTER

In the days following the tornado, students met with city officials and began assisting with ground-floor planning of a system to organize the thousands of volunteers pouring into Tuscaloosa. Registering with the Volunteer Reception Center (VRC) became a requirement for volunteers entering affected areas, and maintaining

Lessons Learned

“`This experience for me was my ‘ah-ha’ moment when I realized that servant leadership isn’t a characteristic; it is a lifestyle we can all pursue in everyday life.”

—DJ Jackson
freshman
history/economics major

“`I learned to make decisions quickly and be confident in those decisions even when I didn’t know what the result would be.”

—David Phelps
freshman
undecided major

“The Bama Dining project forced us to develop detailed plans and organize on a scale beyond any of our previous experiences. It also demonstrated the necessity of adaptability. Because the project had little precedent and both the city and University were still forming their response policies, the project was constantly evolving.”

—John Brinkerhoff
freshman
political science/communications studies major
Diana Broman, a Marketing and Communications studies major, said, “It was incredibly challenging,” said David Phelps, a Fellow with an undecided major. “It was our duty to make it as successful as possible because there were so many people with needs.” In University Fellows spring seminars, the group spent time talking about what it means to be a leader and serve a community. “Having the opportunity to actually do that on a large scale so soon after our discussions was humbling and amazing,” Phelps said.

**BAMA DINING EMPLOYEE APPRECIATION**

Many employees of Bama Dining, the University of Alabama’s food-services provider, lost all their possessions in the storm. Fellows obtained a list of needs affected UA employees. “The additional responsibilities and challenges that came with the project’s expansion were beyond any single person’s abilities,” said John Brinkerhoff, a political science and communications studies major. “Each person seemed to naturally settle into a different role.”

**HOLT ELEMENTARY ENRICHMENT PROGRAM**

When Tuscaloosa schools reopened for the final two weeks of the school year, children who attended Holt Elementary, which was severely damaged by the tornado, were moved to the vacant Lloyd Wood Middle School across town, and continuation of an after-school enrichment program was in question. Since Honors College students volunteer at Holt Elementary throughout the school year, Fellows expressed their ongoing commitment to the children, then planned and executed an after-school enrichment program focusing on arts and teamwork through physical activity.

“We realized that much of the attention was going to be placed in helping the adults in our community during the recovery process,” said DJ Jackson, a history and economics major. “We wanted to provide a little bit of normalcy after everything the kids knew as routine was turned into chaos. Watching these children push through such a devastating time in their lives with such courage inspired me and changed my life.”

Led by Jacqueline Morgan, director of the University Fellows Experience and the University Honors Program, University Fellows also researched ongoing needs and next steps for local nonprofits, national organizations, educational systems, city government and local businesses and volunteered with: Temporary Emergency Services, organizing donated goods; Samaritan’s Purse, removing debris and securing homes with roof tarps and window patching; Holy Spirit Catholic Church, sorting, organizing and distributing donated goods to the affected Hispanic community; American Red Cross, assisting with meal distribution; and Holt Relief Center, organizing and distributing donated goods.

During evenings, Fellows gathered to share and reflect on their experiences. Working in disaster relief differed from projects University Fellows typically undertake in the Black Belt – creating a playground or cleaning a cemetery, for example – in that there was no visible finished product, Brinkerhoff said. “This didn’t conclude with the typical feel-good sensation,” she said. “We were not able to solve the larger problems.”

In many ways, the experience was about forming relationships – with families who lost homes, community leaders and volunteers from other parts of the country – and these relationships can be a measure of success, according to Morgan and Bridgers. The Fellows Experience also positioned students to serve as leaders as UA continues to respond to the community’s long-term needs. “I leave this experience with a desire to both give back to the community that has already given me so much and further connect the student body to parts of the city,” Brinkerhoff said.

To learn how to become a University Fellow, go to honors.chbp.ua.edu and click “Prospective Students” in the University Fellows drop-down menu.
Social Entrepreneurship: Rebuilding Tuscaloosa Today and Tomorrow

*UH 101 Moral Forum students volunteer in the community while developing creative projects to address long-term recovery needs*

As part of a nationally unique service-learning course sponsored by the UA Center for Ethics & Social Responsibility, 81 UH 101 Moral Forum students dedicated more than 1,280 service hours to local relief agencies and vied for $15,000 in funding to implement projects they designed to aid in Tuscaloosa’s recovery from the April 2011 tornado.

While volunteering in the community, these students, working in teams of four, developed 21 creative project proposals to address ongoing, long-term needs they witnessed and heard about from school children, parents and community leaders. Each team talked with community members about unmet needs, identified a possible solution and drafted a proposal and budget to address those needs.

“The students were encouraged to actively engage the people they sought to serve in all aspects of the project—from initial planning stages to concluding evaluations and plans for future efforts,” said Lane McCelland, New College instructor and Moral Forum co-instructor.

Creators of the eight most innovative and thoughtful projects were invited to present their proposals to a panel of judges in November 2011. According to Mark Nelson, vice provost and vice president for Student Affairs and a member of the Moral Forum judges’ panel, the groups did an outstanding job with their budgets, demonstrating “it doesn’t cost a lot to demonstrate ‘it doesn’t cost a lot to demonstrate that we care.’”

USM students in the Moral Forum classes who are both the winners, but all eight projects received some level of funding for implementation in 2012. These initiatives include:

- **Project Bright Side** – An initiative to engage children at the Boys & Girls Club in volunteer efforts, sponsor the children in the creation of their own volunteer projects and introduce them to philanthropy as the children research and decide how to distribute $1,000 to local nonprofits;
- **PlanFirst** – An annual service-learning course designed in collaboration with the city of Tuscaloosa that will provide student volunteers to meet city-identified needs. The first year, the city will train students on zoning and building permit guidelines, and the students will act as liaisons between the city planning department and Tuscaloosa property and business owners;
- **Art for Alberta** – A collaborative, therapeutic art project with the children of Alberta Elementary School and the UA Psychology and Art & Art History departments to take place over the course of the spring semester and culminate with a community-wide celebration and unveiling of the artwork;
- **Trees for T-Town** – A joint effort with the Druid City Canopy Coalition and the Alabama Forestry Commission to host an educational day camp teaching University Place Elementary students about environmental stewardship and culminating with an afternoon of replanting trees in the Forest Lake area;
- **Recycle Tuscaloosa Recycle** – A partnership with UA Recycling and the city of Tuscaloosa that empowers children to protect their environment and recycle as their families and the community rebuild a greener, cleaner Tuscaloosa. The pilot program will be launched at Holt Elementary School;
- **Reading Recharge** – An effort to enhance library recovery efforts at Alberta Elementary by purchasing and implementing technological improvements, showing students and teachers how to use the technology and assisting librarians in cataloging and shelving book donations;
- **Alternative Spring Break Toolkit** – A toolkit to help facilitate affordable housing and project supervision for universities across the country as they organize Spring Break service opportunities in Tuscaloosa;
- **Emergency EDU** – A university-wide, required online emergency education program to ensure all students know what safety measures to take during emergency situations. Students will be required to complete the program before they can register for classes. As they developed their projects, students attended an intensive, seven-week, multidisciplinary lecture series on Tuscaloosa’s response to the April 27 tornado, natural disaster preparedness, the challenges of disaster recovery in low-income areas and the resources and planning needed to successfully rebuild a community.

Guest speakers included tornado survivors, Tuscaloosa Mayor Walt Maddox, members of the Tuscaloosa Forward planning commission, representatives from local relief agencies and the Federal Emergency Management Agency, social service experts and an award-winning architect whose expertise is in sustainable building.

“This project taught me that the people who have been affected negatively by a natural disaster or another tragedy should never be treated as victims, but should be given the opportunity to help themselves and to help others in their community,” said Marissa Ellin, a sophomore majoring in Psychology and Art & Art History department;

In previous years, Moral Forum has been organized around the analysis of one controversial “moral” resolution, with the course culminating in a debate tournament. After the April storms, the UA Center for Ethics & Social Responsibility decided to restructure the course to focus on examining the multifaceted challenges Tuscaloosa faces and to encourage students to develop thoughtful projects to address these challenges as the city rebuilds and recovers.

“It’s encouraging and exciting to see a class like this,” said Kenneth Skalitsky, voluntary agency liaison for the FEMA Region IV Recovery Division and a speaker in the lecture series. “Understanding relief and volunteer organizations at this point in their lives will help students be engaged with similar organizations in the future.”

Learn more about Moral Forum and other CESR initiatives at cesr.ua.edu.
New Jersey native David Aresty had no intention of attending the University of Alabama when he visited the campus in 1975, but “it only took me a couple hours to figure out this was the place to be,” he recalls. Thirty-six years later, with Tuscaloosa devastated by one of the worst tornadoes in Alabama history, it was again the place for him.

Aresty’s family owns the New York women’s apparel manufacturer Alfred Dunner, and the night after the tornado he and other UA alumni began planning an initiative that would involve UA students enrolled in HES 275 Leadership Development Through Service, the Zeta Beta Tau fraternity and at least 150 additional UA student, faculty, staff and alumni volunteers in distributing 35,000 new garments – worth $1 million – to tornado survivors free of charge.

“I’ve been closely connected to the University of Alabama for a long time,” Aresty said. “This is an area where my life started, my career started, where my marriage and family life began. Knowing I had a product that could assist people in rebuilding their lives in some small way made sending apparel here an easy thing to do.”

The clothing arrived at Tuscaloosa’s Central High School June 6 in a 53-foot trailer – the largest Aresty could find – and the Dressing Up! Tuscaloosa event was held at the school June 9-13. UA students served as personal shoppers, assisting approximately 2,200 women in creating outfits from Alfred Dunner’s spring and summer clothing collections. In addition to clothing distribution, the event included makeovers, massages, food, baby-sitting and counseling services provided by the College of Human Environmental Sciences as well as toys, water, medical and personal hygiene supplies tornado survivors could take with them. Anthony Grant, UA men’s basketball coach, donated T-shirts, shoes, hats and other garments for men impacted by the storm.

The ZBT fraternity, of which Aresty was a member, and CHES spread word of the event and recruited volunteers through social networks and various media. Central High School football players unloaded the track – 700 50-pound boxes in 90 minutes – as part of their morning workout. UA volunteers unpacked the boxes, assembled and filled racks, set up displays, organized a stock room and assisted with almost every other facet of the event. Milla Boschung, dean of the College of Human Environmental Sciences, said students studying fashion retailing, hospitality management and child development put principles learned in the classroom to practice in a unique setting.

Creating an efficient system for distributing clothing to such a large group while providing a relaxing, high-end-department-store feel was an important goal all volunteers achieved. Babs Davis, director of fashion retailing at CHES and a Dressing Up! coordinator, said it was apparent one-on-one attention from personal shoppers meant as much to tornado survivors as the clothing.

“We’re helping ladies affected by the storm feel pampered,” said Leah Gates, a health studies graduate student. “It’s exciting to see people’s faces when they’re trying on clothes and getting new garments. It’s rewarding to do.”

Francis Webb, who lost her home and wardrobe to the tornado, said she was surprised to learn brand new clothes were available for free. “I loved it,” she said of the event as she and her personal shopper carried her outfits toward the parking lot.

“UA alum’s $1 million clothing donation brings community together to provide once-in-a-lifetime shopping experience to 2,200 tornado survivors

Marketing major Sarah Hannah (left) volunteers as a personal shopper at Dressing Up! Tuscaloosa, helping Nancy King find the perfect outfit.

TOP: Health studies graduate student Leah Gates shows a tornado survivor to racks of clothes in her size.

Deidre Collins, a senior early childhood development major, gives a child who survived the tornado one-on-one attention while her mother shops. Volunteers provided childcare services throughout the event.

A community effort

The UA College of Human Environmental Sciences partnered with multiple organizations, groups and agencies to make Dressing Up! Tuscaloosa a success. Event contributors included: Alfred Dunner and the Aresty family; Zeta Beta Tau fraternity; UA men’s basketball team; Tuscaloosa City Schools; Central High School football team; Tuscaloosa Mayor’s Office; The Grodner Group; MeetUP for Change; Temporary Emergency Services; Jewish communities in Tuscaloosa, Birmingham and Montgomery; A Tiny Kingdom toy store; and Johnson & Johnson.

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Within hours after a massive tornado cut a gash of destruction through Tuscaloosa, Ala., residents and volunteers began removing debris and making repairs — a testament to the community’s resiliency but the equivalent of a botched crime scene for researchers hoping to learn how structures stood up to high-force winds.

So a quickly assembled research team including University of Alabama engineering students and professors chose five sites throughout the city and froze them in time, preserving every detail in precise, three-dimensional models using a laser scanner.

This gave the team and other researchers around the world a chance to analyze the performance of wood-frame structures and make building-code recommendations that could lead to construction of safer, stronger homes and businesses.

“Weeks, months or years from now, we can still come back to the scene and draw conclusions from the collected data,” said David Grau, assistant professor of civil, construction and environmental engineering.

Creating 3-D “point cloud” models was just one aspect of the Tuscaloosa Tornado Damage Assessment Team’s work. Consisting of the research team took more than a thousand photos and GPS coordinates per day during the assessment project. In the evenings, students organized the photos and created maps to have ready for the disaster team the next morning.

Points on the maps indicated where damage analysis would be most valuable. Researchers took extensive notes and additional photos documenting the affects of the tornado on individual structures and building materials. “I’m from India, and we don’t have wood structures,” said Giraj Kandukuri, a structural engineering ph.D. student. “I had a chance to look through the buildings and see what goes into the walls and roof structure.”

Information the group collected was used to determine EF-Scale ratings and why structures and materials failed.

Less than a month after collecting data, a group led by UA associate professor Andrew Graettinger, whose specialty is computer mapping, launched a website illustrating the tornado’s path, with color-coded dots along it representing structures the team assessed. The color of the dot tells the EF rating at each location, and when the viewer clicks on a dot, a photo of the area pops up.

The data-collection system and the maps created through it provide a clear picture of EF ratings within the tornado’s path and will give researchers the ability to compare how structures performed in recent disasters to how they withstand similar forces in the future — 10 or even 50 years from now — to find out whether structural design changes made a difference.

UA engineering students, professors document tornado path, investigating damage and determining ways to build safer, stronger structures

COLLECTING DATA AND ANALYZING DAMAGE

MAPPING THE PATH

LEFT: John van de Lindt and David Grau of UA’s Civil, Construction and Environmental Engineering Department examine a truss connector plate, which is used in light-frame construction, at an apartment complex the storm destroyed.

LEFT: Members of the research team took more than a thousand photos and GPS coordinates per day during the assessment project. In the evenings, students organized the photos and created maps to have ready for the disaster team the next morning.
of academic researchers and professional engineers from across the country, the group earned a National Science Foundation Rapid Response Grant for Exploratory Research due to The University of Alabama’s proximity to affected areas and the UA engineering community’s eagerness to erect something positive from the devastation. “I see this as the beginning of a new field, tornado engineering — understanding the phenomena and engineering to address it,” said John van de Lindt, professor of civil, construction and environmental engineering.

The research team inspected more than 150 structures, mainly single-family homes and apartment complexes, throughout the 6-mile tornado path May 2-5. Collecting more than 3,000 photos, the team determined the Enhanced Fujita (EF) Scale rating for each structure, with values ranging from EF0 to EF5.

“Your house is your largest single investment as a family,” said Andrew Graettinger, associate professor of civil, construction and environmental engineering. “Kids weren’t at school that day; they went home. So it’s imperative that engineers and scientists pay attention to this important part of people’s lives.”

Nine UA students were members of the team and were essential in collecting and organizing data. Van de Lindt said the project showed students their work can have an impact outside academia and it might entice them to enter the field of tornado engineering. “The experience I gained from walking the damaged areas with engineers from around the world was invaluable,” said Blake Doherty, a graduate student in civil engineering with a focus on construction. “Taking part in the NSF research was a chance for me to take the things I have learned in a classroom setting and apply it to a real-world problem.”

“Kids weren’t at school that day; they went home. So it’s imperative that engineers and scientists pay attention to this important part of people’s lives.”

Debris from this apartment complex was soon cleared, leaving only concrete slabs with no clues as to how the structures stood up to the storm. But one research group, who collected data with the scanner and processed it to create 3-D virtual representations of this site and four others. “The data-acquisition method should be fast as well as effective,” said Alireza Geranmayeh, a Ph.D. student who collected data with the scanner and processed it to create 3-D models. “For the sake of safety, automated, contactless data-collection methods are best. The laser scanning system offers these advantages.”

UA engineering professors, who also scanned structural damage following the Joplin, Mo., tornado, plan to optimize the scanner for disaster assessment so using it will be even faster.

IMPROVING THE CODE

The Tuscaloosa Tornado Damage Assessment Team’s NSF report makes recommendations to meet dual objectives – preserving lives in the direct path of large tornadoes and lessening damage and monetary losses associated with smaller tornadoes or the fringes of large ones. The researchers recommend building codes in tornado-prone areas be made similar to codes in areas affected by hurricanes. The addition of “hurricane clips,” metal pieces that attach roofs to walls and walls to foundations, for example, could prevent winds from ripping away roofs and moving structures off their foundations in 97 percent of tornadoes. This hardware would add only about $1,000 to the cost of a typical home.

The team also recommends certified safe rooms to protect lives in the direct paths of the strongest tornadoes and makes other general safety suggestions.

RECOVERY CAM

For the next few years, UA engineering students will be driving the roads of Tuscaloosa, taking a photo every 3 seconds for a Google-Street-View-style project that will document the city’s resiliency.

An emerging field of study for engineers, resiliency is a measure of time needed to return to “normal” after a failure, said UA associate professor Andrew Graettinger, who devised and oversees the project. “Understanding how an affected area recovers after an event such as the Tuscaloosa tornado is an opportunity for engineers and our students to learn,” Graettinger said. Students are capturing the recovery using an advanced GPS video camera that correlates an image, taken on a certain date, with the image location. UA students collected baseline data for a similar project in Joplin, Mo.

Graettinger said the photos, organized by undergraduate students, will provide insight into engineering and construction practices that allow an area to return to normal quickly.

CHANGING THE CURRICULUM

Fifteen UA civil engineering courses had a tornado-related component during the Fall 2011 semester and many continue to carry this focus. CE 331 Introduction to Structural Engineering, for example, is investigating tornado-resistant design, CE 417 Advanced Project Management is using tornado response/recovery as a project management example and CE 262 Civil & Construction Engineering Materials is examining retrofitting structures with advanced materials to mitigate tornado damage.

Project-based senior design courses (CE 401/402/403/404) are concentrating on recovery, rebuilding and resiliency in the wake of the April 27 storm, said Ken Fridley, department head and professor of civil, construction and environmental engineering. Students are working with Tuscaloosa city officials to create rebuilding plans and design safe rooms and tornado-resistant structures.

For a complete list of courses or more information, contact Ken Fridley at kfridley@eng.ua.edu or 205-348-6550.
Rising to the Occasion

Meet seven students who employed individual talents to aid in relief and recovery after the April 27 storms

MATT CALDERONE
Intern becomes community leader in storm’s aftermath

Huddled in the basement of his fraternity house while a massive tornado tore through Tuscaloosa, Matt Calderone had no idea what the future held. Already a student leader, little did he know he would emerge as a city and community leader in the weeks ahead.

A junior majoring in political science, Calderone was working as an intern for the city of Tuscaloosa prior to the April 27 tornado. In the early morning hours of April 28, he reported to City Hall and was dispatched supplies and volunteers. He fielded calls describing community needs and mobilized resources and volunteers. He determined the center’s operating logistics, and the day after the tornado, he reported to City Hall and was hired full-time in May. “Matt is a very intelligent, hard-working young man and sincerely cares about others and it shows in the work he does.”

Calderone is quick to give credit to others who responded to the storm’s aftermath. “Tuscaloosa has visionary leaders who have responded with patience and poise,” he says. “This city is resilient. Through the compassion of its citizens and the leadership of its elected officials, we will rebuild the City of Champions.”

MATTIE BONDS
Student’s T-shirt design raises $13,400 for tornado relief

For a week after the April 27 tornado, UA sophomore Mattie Bonds volunteered at a relief agency before returning to her summer office job on campus. “As I was sitting at work, I was itching to be doing something to help my hurting community,” she recalled.

Because her mom, a high school choir director, frequently has T-shirts printed for her program, Bonds thought of creating a T-shirt that would encourage Tuscaloosa’s citizens and raise funds for relief efforts. She guessed she would sell, at most, 50 shirts.

“Turns out the world of Facebook is a lot more powerful than I thought,” she said after selling 670 shirts. “Some were even shipped to places like Texas, Georgia and New York to students who had returned home for the summer but still wanted to help out.”

Bonds donated the $6,700 she raised to the city’s Tuscaloosa Relief Fund through the Tuscaloosa Teacher’s Credit Union, which matched the donation, for a total contribution of $13,400.

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"I wanted to bring attention to this plight. We are still rebuilding, and it will be some time before we get back to what we were before.”

Burgin was awarded a $5,000 scholarship as winner of the inaugural 3D Movie Award at the Campus MovieFest International Grand Finale, held June 23-26 in Los Angeles.

"The fact that this project was the first-place winner, out of 50 CMF teams selected to compete, is not surprising,” said Rachel Ramist, assistant professor of telecommunication and film. “Xavier told a compelling story with beautifully shot imagery.”

XAVIER BURGIN
Film student makes disaster personal with award-winning ‘Portrait of the Storm’

Xavier Burgin was planning to create a 3-D comedy about a boy with a Pinocchio complex for a student film festival, but after the April 27 tornado hit Tuscaloosa, he changed direction.

The film he produced, “Portrait of the Storm,” provides an up-close look at the tornado as it swept through Tuscaloosa and includes personal accounts from survivors as 3-D scenes of the devastation fill the screen. UA studio art student Summerin Brandon composed an original score for the film.

“I wanted to make this because this is something the media will just talk about for a few months and then move on,” said Burgin, a senior New College/telecommunication and film student. “People start forgetting what happened, but this is still going on. It’s sort of what we’ve seen happen in New Orleans after Hurricane Katrina. And I felt like Alabama, and Tuscaloosa especially, will at some point have that same problem, so I wanted to bring attention to this plight. We are still rebuilding, and it will be some time before we get back to what we were before.”

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James O’Dwyer knew something bigger with tornado-relief supplies within a week, two 18-wheelers and several smaller trucks. After starting a donation drive that filled communities’ ‘forgotten’ after disasters, focus on ‘forgotten’ areas overlooked by national media and large relief agencies.

The organization also prepares “hit kits” containing supplies small communities need to survive for several days after a disaster. The kits are stored throughout the Southeast to be delivered immediately after disaster strikes. The first kit was sent to Columbus, Miss.

In addition to raising money, “the name Magnolia came from the idea of southern hospitality and helping your neighbor,” said O’Dwyer, who’s majoring in mechanical engineering and Spanish. “Not much can represent the South as well as a branching magnolia tree, thus the slogan ‘Branching Out to Serve Those in Need.’”

In the aftermath of the April 27 storm, more than 60 Magnolia Disaster Relief volunteers sent supplies to the Alabama communities of Ider, Phil Campbell, Tuscaloosa, Huntsville and Webster’s Chapel; to three Georgia communities; and to Columbus, Miss.

On June 3, Tuscaloosa was alive with music as 55 bands descended on the city for the Roll Tide Relief Benefit Show. Coordinated by a 10-member committee including three UA students, the all-day benefit show featured musicians from around the country, activities for children, a silent auction and art displays.

More than 500 people attended the show, and proceeds from the $10 admission at the door went to relief efforts. An additional $200,000 was raised through an online campaign to Reading, Kan., on May 21, 2011.

Follow the April 27 tornado, a small group of UA Greek students decided to provide hot meals to those in need. Utilizing the resources of the Greek community and reaching out for volunteers across campus and the community, their simple idea grew into an initiative much larger than they imagined.

“UA Greek Relief began as a few fraternities and sororities cooking food intended to be eaten during finals week,” said James Fowler, co-chairman of the UA Greek Relief Board of Trustees and a recent graduate with degrees in business and political science. “After the first day of preparing food, our operations quickly expanded to all fraternities and sororities, and we had volunteers from all corners of the campus, city and even the nation.”

By the end of its eight-day, immediate-relief effort, UA Greek Relief – which involved more than 600 volunteers – had distributed more than 52,000 hot meals to tornado survivors, police officers and volunteers. On one day alone, “UA Greek Relief volunteers prepared over 10,000 meals, accounting for one-third of the relief meals that day as reported by the city,” said Patrick Morris, co-chairman of the UA Greek Relief Board of Trustees and a senior majoring in business management.

In addition to preparing hot meals, Greek Relief volunteers distributed hundreds of thousands of pounds of water, canned goods, hygiene items, clothing, baby supplies and other nonperishable goods during the week following the storm. As the needs of the community shifted in the weeks and months following the tornado, fundraising became UA Greek Relief’s focus. “To date, we have raised $200,000 and will continue to fundraise through the end of the calendar year,” Fowler said in August.

Morris said the experience improved leadership and management skills that will help him in the business world and inspired him to continue serving others through his profession or by starting a charitable organization. “I’ve learned through this experience that no matter how big or small the effort or however much you can volunteer your time, you can make a difference,” he said.

To learn more about UA Greek Relief or to make a donation, visit uagreekrelief.com.

Student launches nonprofit to aid communities ‘forgotten’ after disasters

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Student launches nonprofit to aid communities ‘forgotten’ after disasters
After the April 27 tornadoes practically leveled Alberta City and Holt – the two largest immigrant neighborhoods in and around Tuscaloosa, respectively, and affected other immigrant communities across Alabama – Michael Innis-Jiménez altered his new service-learning course, Immigration and Ethnicity in the American South, a fall class he had taught just once.

“We changed it because I saw this as a perfect learning opportunity for the students to see how a disaster is different for an immigrant community as opposed to the rest of an area,” Innis-Jiménez said.

In addition to examining the Latino immigrant journey and life in the American South, the 17 students enrolled in the Fall 2011 course, Service Learning in the Latino Community: Immigrants in a Disaster Zone, learned about the effects the April tornadoes had on Alabama’s Latino immigrant communities and how their recovery needs vary from those of non-immigrant communities. They also interacted with Latino immigrants, or organizations serving them, through service-learning projects focused on disaster relief.

Students didn’t have to be Spanish speakers to take the course, but about a third were fluent in the language. Guest speakers, lectures, reading assignments, films and class discussions helped students better understand the historical and contemporary issues confronting Latino immigrants in the region. Along with tornado recovery, an overarching contemporary issue and major focus of the course was Alabama’s new immigration law – one of the toughest in the nation – which went into effect Sept. 29. Alabama began requiring public schools to check the immigration status of new students, made failure to complete or carry alien registration documents a misdemeanor and began allowing police to hold suspected illegal immigrants without bond.

“The response of local Latinos to the April 27 tornadoes cannot be understood without taking into account House Bill 56,” said Mary Scott Hodgin, a sophomore majoring in Spanish and New College evolutionary studies.

Hodgin, who took Innis-Jiménez’s two previous Service Learning in the Latino Community courses and the 2011 disaster-recovery class is for students to form links to immigrant communities that will give them a vested interest in their members or, at least, continued awareness.

“It appears to be working. “Through this experience, not only have I learned about the many problems faced by the Latino community, but I have also been further exposed to the politics that surround the topic of immigration,” Hodgin said. “I would like to assist immigrants whenever possible.”

Elyse Peters, a junior from Houston who plans to become a lawyer, said the course solidified her theory that many of the problems facing the Latino community are due to misunderstanding. “This course has allowed me to see firsthand the effects bad policy can have on many communities,” she said.

“The human element of politics will only exist if people are vicariously active in the process.”

To learn more about the Service Learning in the Latino Community course, contact Innis-Jiménez at mdinnis-jimenez@bama.ua.edu or 205-348-9766.
in two historic neighborhoods

In 1980, Kathy Orths was a VISTA volunteer who assessed hundreds of homes near a Utah Navajo reservation to determine what repairs or weatherization could be done through a U.S. Department of Energy grant to make them more efficient. Now a University of Alabama anthropology professor, Orths used that experience to train and lead a group of students in performing damage assessments on behalf of the city of Tuscaloosa in two historic neighborhoods after the April 27 tornado.

“I had to get to know houses inside and out and how to fix them,” Orths said. “It made me feel like there was something I could do.”

After salvaging the contents of nine destroyed homes occupied by anthropology students and alumni and UA faculty, the UA Anthropology Tornado-Relief Crew – consisting of 30 anthropology students, faculty and staff registered with the city as a volunteer organization May 8. When they learned volunteers were needed to conduct home damage assessments, they knew they had found their niche.

“We have specific skills in our department,” Orths said. “We read maps, conduct interviews and do surveys and ethnographic profiles. It wasn’t a stretch for us to go into affected areas and talk to people.”

From May 10 to 13, seven undergraduate and graduate students and four professors evaluated 120 undergraduate and graduate students to people.”

The Anthropology Crew continued cleanup efforts and organized donated goods during summer 2011, said Erik Porth, an anthropology student who received his master’s degree and began doctoral studies at UA in August. “The initial response from the region provided a lot of volunteers, but after a couple of weeks people needed to get back to their lives,” he said. “The cleanup in Tuscaloosa is going to take a long time, and we plan on being a part of that effort.”

Disaster Relief Internship Program

While most students left Tuscaloosa for the summer, returning home or studying abroad, a significant number chose to stay in town and serve in tornado-recovery efforts through unique internship opportunities.

Established by Norman Baldwin, associate professor of political science, to help meet community needs following the April 27 tornado, the UA Disaster Relief Internship Program places students in community-based internships through partnerships with the city, local nonprofits and relief agencies and offers independent-study credit in their chosen fields.

The internships are coordinated to match students’ skills and interests to recovery and rebuilding needs, supplying community agencies with long-term, consistent manpower.

“We have been able to offer some continuity to relief agencies that previously were relying on volunteers who rotated on a daily basis,” said William McCracken, DRIP program coordinator and political science graduate student. “Our interns are ‘in the field’ long term, and so are able to maintain stability from day to day for the agencies and bring volunteers up to speed quickly.”

During Summer 2011, 70 students were placed in internships and most completed approximately 150 hours of service. Students worked at 14 agencies including Temporary Emergency Services, relocated the contents of a community member’s home and removed trees and debris from houses.

The Anthropology Crew also sorted donations at Temporary Emergency Services, relocated the contents of a community member’s home and removed trees and debris from houses.

The internship presented an incredible opportunity to get my boots on the ground and contribute to the rebuilding of a city that has given me so much,” said Henry Joe, a senior majoring in international studies who interned as Temporary Emergency Services’ warehouse floor supervisor.

Independent-study students complete an academic assignment, such as a research paper, presentation or proposal, connecting the internship to their academic degree. "Student interns gain practical experience to better prepare them for entrance into the workforce, while furthering their academic careers," said Kristie Edmonds, DRIP assistant coordinator and a senior majoring in history.

The internship program is scheduled to continue at least through summer 2012, and scholarships are available for Spring and Summer 2012. If you are interested in participating, e-mail your resume to wadrip@gmail.com.

Lessons Learned

“My people skills and ability to make decisions under pressure were certainly put to the test over the coursework of the internship. My experience at TES has had an incredible impact on my future aspirations, as it has reaffirmed my desire to help others.”

— Henry Joe, senior international studies major

“By the end of my internship, I had taken on several responsibilities at Tuscaloosa’s Volunteer Reception Center. The VRC helped me realize anything is possible with willing people, organization and a positive attitude.”

— Latosa Patterson, public administration graduate student
After selling his share in the international automation and construction business he built, Riz Shakir moved to his wife’s hometown of Tuscaloosa two years ago and began teaching at The University of Alabama while devoting an increasing amount of time to natural-disaster relief efforts around the world. He found a familiar scene in his own backyard April 27, 2011.

Like many who aided in the immediate aftermath of the storm that struck Tuscaloosa, Shakir was drawn to the Alberta and Holt neighborhoods, two of the hardest hit areas in and around the city. “These were working-class people trying to scratch out a living from paycheck to paycheck, then this disaster struck,” he said.

Witnessing the flood of organizations and volunteers pouring into the area, Shakir and others realized an umbrella organization was needed to coordinate efforts. With the help pouring into the area, Shakir and others realized an umbrella disaster struck,” he said.

“More than 4,500 people had volunteered with Project Team Up as of October 2011, and about 1,000 are members of the UA community, Shakir said. Twenty UA students earned service-learning credit for their work with Project Team Up in Summer and Fall 2011 through the Disaster Relief Internship Program [see page 47], HES 275 Leadership Development Through Service, HES 450 Volunteerism and Civic Responsibility and SOC 490 Gender and Poverty. UA athletic teams helped with debris removal and clean up during Summer 2011, and advertising and public relations students began working on communications projects for Team Up in Fall 2011. Initially, Project Team Up and its partners focused on providing food and other necessities to tornado survivors and clearing their property. While still serving meals daily in a mobile kitchen, the group’s efforts had shifted by mid-fall 2011 to repairing and rebuilding homes and helping those in need through its partners, which include Nick’s Kids, Soma Church, ACTS World Relief, Reach Our World Wide and many others.

“The most rewarding part is getting to know the people and being able to see the changes in the community,” said Mary Kathryn Daugherty, a senior majoring in advertising and successfully pitching Project Team Up to the Capstone Ad Agency. UA’s student-run public relations firm.

Having the opportunity to work on a real communications campaign while still in college was invaluable, “especially since it’s for an organization that’s doing great things,” said Brett Horsley, who led a team of other PR students doing work for Project Team Up. “It’s been one of my biggest learning experiences.”

Anne Warren, a SOC 490 student and senior majoring in advertising, said volunteering with Project Team Up was a perfect way to see how issues and circumstances she was learning about in class were affecting those in her own community. “Many people are a natural disaster away from living in poverty,” she said. “Project Team Up is trying to keep that from happening.”

Even for area homeowners who have insurance, there’s usually a $20,000 to $30,000 gap between the amount of money they receive and the amount they need to return to normal, Shakir said. A typical example is a family of four with home insurance but without vehicle insurance. Both vehicles were destroyed by the storm, so they used some of their homeowner’s insurance payment to buy a car so they could continue working. Now they don’t have enough money to rebuild. “We can step in and help bridge that gap,” Shakir said.

Besides Shakir, Project Team Up leaders from UA include Janet Griffith, assistant provost for communications, Thad Turnispeed, director of athletic facilities, and alumna Kimberle Barton of Kimberle Barton Mortgage Lending.

Shakir said Project Team Up’s plans for the future include fundraising, economic development and training and education for Holt and Alberta citizens. The group dedicated a community garden in Holt in October 2011.

“We’re taking a holistic approach so the community can come back better than before,” he said.

UA students will have opportunities to assist with all these efforts. “We can be an example for the rest of the country to see how a university can use its resources to give back after such a traumatic event,” Shakir said.

To learn more about Project Team Up, visit projectteamup.com.
I n early April, a group of students stood outside UA’s Paty Hall talking about the weather and how quickly a warm, beautiful day in the Southeast can turn ominous. By April 15, they had launched the UA Meteorological Society, a student organization dedicated to teaching members about weather patterns and keeping the Tuscaloosa community informed about upcoming storms.

Also on April 15, UAMS members visited the Tuscaloosa County Emergency Management Services headquarters, where they took photographs and shot video of an EF-2 tornado, footage National Geographic later purchased. Less than two weeks later, they witnessed a much larger tornado wreak havoc on Tuscaloosa. This time they dug through rubble for hours after the storm, searching for survivors and transporting them to the hospital.

“When we saw the tornado exit the area, we immediately got down there, within about five minutes,” said Brantley French, co-director of the storm-chasing division and a junior majoring in criminal justice, said UAMS follows weather trends days and weeks in advance and informs the public through its blog (uamswx.blogspot.com) and Twitter (twitter.com/UAMS1).

On April 15, UAMS beat other tornado warnings by about 10 minutes. The group’s Twitter followers include renowned Birmingham meteorologist James Spann, Tuscaloosa radio station B101.7, the UA Ferguson Student Center and several businesses. “We are a university group, but we are also very involved with Tuscaloosa,” said Vice President Chris Amalfitano, a junior majoring in public relations. “We want to let everyone know what’s going on, especially businesses, and help people understand what they need to do during severe weather.”

For more information about the organization or to join, contact Patrick Reilly at pareilly@crimson.ua.edu.

One of the fastest growing student organizations on campus, UAMS was founded with five members and by August had grown to more than 40 students trained by the Tuscaloosa County EMA in emergency response and storm spotting. Members learn how to distinguish between different types of clouds, collect data necessary for severe-weather warnings, predict weather patterns, perform basic first aid and search and mark damaged buildings. To be part of the storm-chasing division, students must earn National Weather Service storm-spotter certification.

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Efforts like those of UAMS are a “biggie” in helping to protect lives in the Southeast, according to National Geographic’s website. “In 2011, a record 1,794 tornadoes were reported in the U.S., killing 51 people and leaving 1,161 injured,” the site says. “This was the third most active year for tornadoes in the last 50 years.”

The UA Meteorological Society members transporting One Pheannagh, who sustained major head trauma, to DCH Regional Medical Center appeared in the Tuscaloosa News. UAMS member Kendal Wadley (white shirt) is accompanied by EMT Jason Tyler Snow. Photo courtesy Tuscaloosa News

ABOVE: This photo of UA Meteorological Society members transporting One Pheannagh, who sustained major head trauma, to DCH Regional Medical Center appeared in the Tuscaloosa News. UAMS member Kendal Wadley (white shirt) is accompanied by EMT Jason Tyler Snow. Photo courtesy Tuscaloosa News

LEFT: A still shot from UAMS video shows a view of the April 27 tornado from south Tuscaloosa. National Geographic has purchased video footage from the group.

UA, Auburn students join forces to rebuild homes destroyed by tornado

T he in-state rivalry between Alabama’s two largest universities produced more than an entertaining sports match-up this year. The House United Habitat for Humanity building project turned the rivalry into a partnership that put roofs over the heads of two Tuscaloosa families who lost their homes to the April 27 tornado.

For five hot July days, 60 UA students and 30 Auburn University students, led by Habitat for Humanity coordinators, worked in the Holt community, just outside Tuscaloosa.

“When people are united for a common goal, something that looks hard becomes a lot easier,” said Jordan Carpenter, a UA junior studying environmental science. “Whether you’re holding up a beam while someone measures or are putting up walls, everyone has a valuable role to play.”

Auburn and Alabama students stayed in UA residence halls, ate meals together and spent evenings reflecting on their experiences with the project. This was the first House United build between the two institutions, and plans for the project turned the rivalry into a partnership that put roofs over the heads of two Tuscaloosa families who lost their homes to the April 27 tornado.

“We are looking forward to this being an annual event where the two institutions can come together to help benefit other areas of the state,” said Wahnee Sherman, director of the UA Community Service Center.

The home of Teddy and Rosie Rowe was in the direct path of the EF-4 tornado that devastated communities in and around Tuscaloosa. Only their home’s foundation survived. The Rowes run Rosie’s Café and Catering and a cleaning service and were living in a trailer supplied by the Federal Emergency Management Agency before students rebuild their house July 18-22.

Carpenter said the project gave him inspiration for post-graduate plans. “I’m interested in sustainability and sustainable environmental practices,” he said. “I met a guy whose job was to make sure everything was built in an energy-efficient manner, and I thought I might want to do that.”

Clay Turner, a UA senior studying civil engineering, was able to put the skills he learned at UA to good use.

“Everything we’re doing here – like building trusses and framework for the houses – has to do with engineering,” he said.

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After April 27 storm, Tuscaloosans faced a tremendous challenge: rebuilding a nearly mile-wide swath of destruction traversing the entire city. Andrew Grace, director of UA’s Documenting Justice film program, led a team of six current and former students who used skills gained through Documenting Justice – a two-semester course in which non-film majors create social-justice-themed documentaries – to record this process and tell the stories of people affected by the tornado.

When the storm struck, recent UA graduate Lindsey Mullen was working with adults with special needs in Ireland and came home early to help in Tuscaloosa.

“I was interested in working in some kind of creative project, and I was also needing a way to process some of my own feelings about what happened with the storm,” Mullen said. “I thought that this project would be both.”

During Fall 2011 Mullen worked full time on the project, coordinating and conducting interviews with people who were displaced or affected by the tornado.

“In my experience in International Doc Justice in Kenya, I was talking to people who had experienced extreme poverty and personal tragedy – people who were orphaned by AIDS or were dying from AIDS,” Mullen said, “and that has prepared me for talking to people who have been affected by the storm.”

Drew Hoover, a senior majoring in history and studio art, screened his Documenting Justice film the day before the tornado. “One of the few good things the tornado has caused is the opportunity to learn something intimate about our neighbors, our communities and our city that we could not know otherwise. This is why I want to work on this project.”

Hoover is working primarily as a project photographer, documenting community events and taking portraits of featured individuals.

Grace, who lives in Forest Lake, a neighborhood that sustained some of the worst tornado damage, sees the After The Storm documentary project as a way for people to recover. “I think storytelling is important – it helps us to make sense of the world,” Grace said. “When something as catastrophic as this storm happens to us, I think it’s natural that we turn to storytelling to help us cope and figure out how to move forward.”

Students followed multiple families and individuals whose lives were altered by the storm. They include former Tuscaloosa Mayor Al DuPont, Tuscaloosa City Planner John McConnell, Forest Lake Neighborhood President Christine Dietsch and Soma Church Pastor Shaun Faulkner.

Dupont was in Louisiana when the tornado struck, and his home in the Cedar Crest neighborhood was destroyed. The ATS crew documented completion of his new home, which was the first rebuilt on his street. As a young city planner, John McConnell is faced with the daunting task of organizing the rebuilding of 12 percent of Tuscaloosa. Shaun Faulkner’s home sustained severe damage, and his church, the only building standing in its immediate surroundings, became the central hub of volunteer and aid distribution for the Holt community, located just outside Tuscaloosa. Christine Dietsch and her husband, Neil, were in their Forest Lake home when the tornado destroyed it.

The documentary will not be presented at a traditional film screening. Instead, it will live online as a growing project – since the rebuilding process will take years – and its presentation will be interactive. Through a map of affected areas that will contain links to stories and multimedia features, viewers will navigate among numerous individual narratives. The primary storytelling format will be audio-slideshows (audio played with still photographs), though the project also will feature video.

The project will not be complete until Fall 2012, but a few of the videos are available at whatcomesafter.org.
Since breaking ground in May 2010, more than 40 UA students have participated in the Druid City Garden Project, planting seeds, harvesting vegetables and helping increase public awareness about community gardening, sustainability and healthy eating. With the garden located on the campus of University Place Elementary, it also has hosted approximately 180 pre-K through third-grade children who work alongside UA students.

“It’s a nitty-gritty, hands-in-dirt kind of thing,” said Lindsey Turner, a senior majoring in musical theatre who began volunteering in Fall 2010. “We do a lot of garden maintenance, but we also learn about food policy and agricultural practices. It gives people an introduction to what gardening is actually like.”

Rashmi Grace, a project founder and Honors College instructor, said the garden was created with several goals in mind.

“We were interested in community food outreach,” Grace said. “We wanted to increase access to local produce and start a dialogue about it, so we developed a space that could be used as a teaching tool for both UA students and the community.”

While taking UH 300 Reading into Sustainability with instructor Adam Weinstein, another garden founder, Turner was required to spend at least one hour each week at the garden doing things like turning soil, planting seeds and starting new vegetable beds. Reading and discussion topics for the course include food security and safety, access to fresh, healthy food, urban farming/gardening, school gardens, and food as an issue of social justice. After volunteering at the garden a few months, Turner also began going there on her own to work with University Place students, helping them plant seeds, participate in vegetable tastings and identify vegetables for scavenger hunts.

Her favorite thing about working at the garden has been getting the students excited about vegetables.

“At the end of the fall, we asked one of the classes what their favorite vegetables were, and all of these 8-year-olds yelled out, ‘kohlrabi.’ It was funny because none of them would have tried kohlrabi if the garden hadn’t been there,” Turner said.

Pre-kindergarten students at University Place Elementary plant chard.

University Place school was severely damaged by the April 27 tornado, and the garden was littered with fiberglass and other storm debris. Volunteers cleaned up the garden, plowed under or tore out crops and had re-planted the space with flowers by July. Students in Grace’s UH 300 course will continue to work both in the garden and with the elementary students.

“The garden is full of life and color and has become a symbol of hope for our community’s rebirth and renewal after the storm,” Grace said in August. “We’re hoping the school board will allow us to bus the students to the garden. Right now, we’re working on fundraising to make that happen.”

Pre-kindergarten students at University Place Elementary plant chard.

Lindsey Turner, a senior majoring in musical theatre, helps a first grader with a planting.

Lindsay Turner, a senior majoring in musical theatre, helps a first grader with a planting.
The costly rates often charged for professional website-development services keep the benefits of a quality Web presence out of reach for many non-profit organizations. Launched in Fall 2010, Virtual Advantage: Developing Websites for Alabama Nonprofits is a UA service-learning initiative that seeks to eliminate this barrier while providing practical experience for college students studying computer science, marketing, business, public relations, journalism and photography.

Through Virtual Advantage, a partnership between the UA Center for Ethics & Social Responsibility and the Alabama Association of Nonprofits, students create or revamp websites for charitable organizations. During the Fall 2010 and Spring 2011 semesters, 17 undergraduate and three graduate students developed sites for 10 nonprofits across Alabama.

“There is no substitute for real-world experiences, and Virtual Advantage gave me plenty. Not only working on the websites themselves, but also through coordinating ideas and aspirations from our non-profit clients. It was a privilege to be able to help others and give them something they actually need.”

– Jacob Hartin, computer science graduate student

Students were assigned to work with specific nonprofits, and each helped develop the websites by doing one or two of three things: writing content, building the sites or taking photos. Through interviews with the nonprofits’ staff, examination of existing documents and information, including brochures, grant applications, mission statements and newsletters, writers created professional Web content for the nonprofits. Computer-science students were responsible for the functionality and technical aspects of the sites and for providing a way in which nonprofit staff members could easily update them. Photography students learned about the nonprofits’ activities and worked with staff members and content writers to determine what types of photos were needed and to take them. Content writers, computer-science students and the nonprofits collaborated on the site designs.

Andy Ray, a senior studying operations management and computer science, said he enjoyed the project because he learned a great deal while giving back to the community. “Some things a person can learn by sitting in a classroom, but Virtual Advantage gives students a hands-on learning experience,” Ray said. “The non-profit organizations have such a passion for what they do, and being able to give them a website to help them get their message out is very rewarding.”

Developing and maintaining a professional Internet presence is vital for nonprofits, said John Stone, president and chief executive of the Alabama Association of Nonprofits. “A well-crafted and designed website opens powerful channels of communication between an organization and potential donors, constituents and the community,” Stone said. “This innovative partnership is an outstanding example of the services higher-education institutions can provide to the nonprofit sector.”

Joanna Brand, administrative director of the Arc of Walker County, a health and social services provider for children and adults with developmental and intellectual disabilities, said she looked through each page of her organization’s new site like a kid in a candy store when she received a first draft. “We have all enjoyed this process and the outcome is fantastic,” she said. “We have received tons of compliments from staff and families.”

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– Jacob Hartin, computer science graduate student
UA Students prepare high schoolers for rigorous math, science courses and success in college through UH 300/NEW 310

Advanced Placement mentoring initiative

CollegeFirst
AN ADVANCED PLACEMENT MENTORING INITIATIVE

Summer break began weeks ago, but high school students are gathered around Petri dishes in a dark, state-of-the-art biology lab, looking at glowing E. coli bacteria they infused with jellyfish DNA the day before. A college student leading each small group explains how a heat-shock treatment encouraged the bacteria to absorb the DNA.

The students are part of CollegeFirst, a nationally unique service-learning course and summer enrichment program designed to prepare high school students – particularly those from underserved schools – for the challenge of college-level Advanced Placement courses in math and science. In 2011, the initiative’s second year of operation, 40 University of Alabama students working in Tuscaloosa, Birmingham and Huntsville led 215 rising high school juniors and seniors through three weeks of rigorous academic curriculum, including calculus lessons and biology and chemistry labs, through a course developed by the UA Center for Ethics & Social Responsibility.

College students spend an initial week during Summer Term I learning how to be tutors and studying issues related to educational disparities and creative education reform initiatives.

Recent UA graduate Connor Johnson, an aspiring physician who entered Harvard Medical School in Fall 2011, said CollegeFirst gave him an opportunity to apply his understanding of science in a way that helps others. “I have developed a greater teaching ability, learned about organization strategy and implementation, and, most importantly, I have seen students grow in knowledge and confidence,” said Johnson, who tutored in chemistry.

Advanced Placement courses enable high school students to take college-level courses taught by teachers in their high schools. Students who pass AP exams are three times more likely to earn a college degree than those who do not, according to the College Board.

Stephen Black, director of the Center for Ethics & Social Responsibility, said CollegeFirst is an unprecedented collaboration among universities, high schools and cities to provide instruction to kids willing to give up a month of summer vacation to study some of the most difficult academic subjects.

“One of the points of the initiative is to make people realize there are kids willing to work hard to meet expectations, no matter how high they are set,” Black said. “This initiative provides successful college students as both tutors and mentors, helping increase the number of Alabama students who will be ready not only to attend college, but to excel in college.”

CollegeFirst was developed in partnership with AP College Ready, a statewide initiative working to improve AP success in math, science and English. While 16.9 percent of America’s public school graduating class of 2010 received a passing score on an AP exam, only 9 percent of Alabama’s public school students received a passing score. After just one year in AP College Ready’s program, 23 Alabama high schools in five districts showed a 106-percent increase in passing AP math, science and English scores – 16 times the national average increase of 6.6 percent. Last year, Alabama led the country with the largest increase in passing math, science and English AP scores.

“We are ready not only to attend college, but to excel in college.”

– Jacqueline Koncsol, CollegeFirst biology tutor

To learn more about CollegeFirst, visit cesr.ua.edu or contact the Center for Ethics & Social Responsibility at cesr@ua.edu or 205-348-6493.

ABOVE: UA student Kristi Wu (right) and Marika Gray (Tuscaloosa County High School) identify an unknown acid.

“CollegeFirst has been one of the most fulfilling experiences I have ever participated in. The kids saw how much we believe in them and want them to succeed, and they now believe in themselves.”

– Jacqueline Koncsol, CollegeFirst biology tutor
DN 403 Approaches to Dance Instruction students gain teaching experience while bringing the benefits of dance to children in public elementary schools

Kristen Brister has taught studio dance classes since she was 16, but the dance and education major signed up for UAs dance instruction course in Spring 2011 to learn new teaching techniques and gain experience in public schools. Working with children who would not otherwise be exposed to dance opened a new, exciting world for her.

“I loved teaching kids who weren’t there specifically for dance,” said Brister, a junior. “Dance in school is so important because it provides a creative outlet for kids to express themselves and lets them have fun in a way that is healthy both physically and emotionally. This is something that will impact my skills as a teacher and hopefully will impact their lives in some way.”

Sarah Barry, assistant professor of dance, added a service-learning component to DN 403 Approaches to Dance Instruction after joining the UA faculty in 2007 and teaching dance in area public schools herself. “I really believe every child should have the experience of doing something related to dance,” Barry said. “Every child is given a box of crayons and allowed to explore art, even though not every child will become an artist. But dance usually is not part of the curriculum.”

During the first half of the semester, Approaches to Dance Instruction students study teaching principles, methods and philosophy and develop lesson plans. They then teach dance in physical-education classes at public elementary schools two or three days a week for five weeks. Since 2007, 42 UA students have taught dance to 750 first through third graders at Arcadia Elementary, Oakdale Elementary, Northington Elementary and Tuscaloosa Magnet Elementary.

The instruction UA students provide differs significantly from traditional dance lessons, which focus on specific styles such as jazz or ballet and emphasize memorization of steps. Instead, “creative movement” is the objective. UA students might play a selection of music with tempos ranging from fast to slow and tell the kids to consider how the beat makes them want to move. “It’s a lot of improvisation and exploration,” Barry said. This type of instruction helps children develop creativity, solve problems and learn to express emotion while meeting physical-education goals regarding strength, flexibility, balance and motor control.

UA students also relate academic concepts such as counting, fractions, rhythm and timing to dance. In one game, for instance, the room is split into sections containing imaginary substances like marshmallow or bouncing balls and children show how they would move through these spaces.

“I never knew I would love teaching the kids as much as I do. I worked with several special-needs children, and seeing them come to the class and not worry about anything changed my whole outlook on dance.”

— Kanaan Hammett, Spring 2010

“My idea of primary education has changed drastically since I started this experience. Taught at the primary-education level, dance enlightens and makes children more culturally and artistically aware. One of my goals in life is to expose inner-city students to dance.”

— NaShayla Jones, Spring 2010

“Letting the children use their creativity works really well. They get excited when they get to do their own thing, and mixing specific movements with guided creativity helps them retain concepts.”

— Emily Jones, Spring 2010
Since joining the UA faculty in 2006, assistant professor of biological sciences John Clark has led more than 100 students in eradicating invasive plant species from the grounds of Tanglewood, a 480-acre nature preserve in Hale County, Alabama. They have accumulated more than 1,600 service hours for the project.

Invasive plants are non-native to the ecosystem and cause environmental or economic harm. Because these alien plants – often transported to an area by humans – typically have no natural predators or diseases in the new environment, they spread rapidly, replacing native plants.

Clark’s Plant Systematics class is held each spring and teaches students to identify plants native to North Alabama. In doing so, students also learn to recognize non-native plants, and they each devote a minimum of 15 hours to removing harmful species from Tanglewood, the University of Alabama’s J. Nicholene Bishop Biological Station.

Stephanie Foley, a 2011 graduate who majored in biology, said the class was her favorite. “You learn without being bored because everything is hands-on,” Foley said. “He showed us plants, not just pictures of plants in books.”

Foley also realized she enjoys scientific research. “Because of that class, I started working in Dr. Clark’s lab and discovered I love lab work,” she said. “Now, I want to go to graduate school and study cancer research.”

At Tanglewood, students uproot Chinese privet, which was introduced in the United States as an ornamental shrub in 1853 and is one of Alabama’s 10 worst invasive plants, according to the Alabama Invasive Plant Council. The shrub has spread through much of Tanglewood, where students dig up its long roots by hand – a challenging task amid Alabama’s dense underbrush and trees – and accept risks such as being exposed to poison ivy and insect bites and stings.

“Helping eradicate invasive species is very hard to do,” Clark said.

At the end of the class, students are required to turn in portfolios identifying more than 100 plant species. To accomplish this, they travel throughout North Alabama. “The goal of the class is to study plant diversity, and to do that students must get out of Tuscaloosa,” Clark said.

Chad Colon, another 2011 graduate and former BSC 434 student, said his favorite part of the class was being able to go outdoors and see what he was studying. “We weren’t just sitting in a classroom,” Colon said. “We’d come into class, and he’d lecture to us for about an hour about conifers. Then we’d go out in the field and study pines.”

For more information about BSC 434 Plant Systematics, contact John Clark at jlc@ua.edu or 205-348-1826.

John Clark also leads BSC 325 Tropical Plant Diversity, a course he teaches in the rainforests of Ecuador, where students spend three weeks in May hiking and interacting with villagers and employees of the Bilsa Biological Reserve.

Caroline Murray, a junior studying business and communications, said the group spent most of its time in rural areas, with indigenous people who are devoted guardians of the forest.

“I learned so much more than I would have in a traditional classroom setting,” she said. “It was great to see what I was learning about in real life.”

Students learned how to identify families of plants by looking for defining characteristics. Their final project was a presentation about one plant family’s characteristics, relatives and natural history.

Alabama in Ecuador
Students in Biological Outreach create, then teach hands-on biology lessons for children in Tuscaloosa-area elementary, middle and high schools. Recent projects range from designing edible cell models and growing a garden to discussing healthy eating habits and maintaining proper dental hygiene.

Students are responsible for identifying a scientific concept to teach, deciding how to introduce it to the kids, choosing a hands-on activity to reinforce the concept and assessing how well the children understand the material. Students typically are grouped in teams of three to develop their lesson plans, gather materials and teach an engaging lesson. Afterwards, each student writes a post-teaching assessment report.

“In this class I didn’t just teach; I learned patience, responsibility and how to deal with people,” said Perri Smith, a senior majoring in general health studies.

The outreach program started in Spring 2008 at Matthews Elementary School with approximately 45 children and a handful of UA students. By Spring 2011, the program had expanded to approximately 300 children at seven schools – Cottondale Elementary, Brookwood Elementary, Crestmont Elementary, Holt Elementary, Davis-Emerson Middle School and Holt High School. During the 2010-11 academic year, 65 UA undergraduates and 12 UA graduate students regularly led the biology lessons.

In one activity, students combined four cardboard boxes, a few plastic drain-

age pipes and a red tablecloth to create a model heart for teaching elementary-

age children about the circulation of blood throughout the body. Each cardboard box represented a chamber of the heart, while the drainage pipes represented the path of blood flow to and from extremities and lungs.

“The goal is to expose the kids to things they might not see otherwise and get them excited about science,” said biology instructor Kim Lackey. “We also try to incorporate some kind of math and/or reading element into every lesson to reinforce those skills.”

At the outset of the heart lesson, the children knew little about the heart and blood circulation, but they eagerly volunteered to sit in different chambers of the heart and play the roles of the body and lungs. As the afternoon progressed, the children gained more confidence and began shouting out the next direction of blood flow as they passed a ball, meant to represent a drop of blood, from one chamber of the heart to the next through the pipes.

When one of the pipes slipped out of the cardboard heart, a UA student shouted “We need surgery!” Lackey seized the opportunity to explain to the elementary students that the college students were replacing the pipe, much like a doctor might do a heart bypass in a real surgery. The slight mishap turned into a teaching moment for the kids, but it also provided her students a lesson in quick thinking and explaining complicated procedures to children.

Each semester UA students are faced with similar challenges and rewards. “This class makes you dig deep in your brain and pull out all the knowledge you have spent years in school learning about biology,” said Rebecca Howe, a junior majoring in human development and family studies.

The course is made possible through a partnership between the UA biology department and Tuscaloosa’s One Place and is partially funded by a grant to Tuscaloosa’s One Place from the Riverfront 21st Century Community Learning Center.

To learn more about the course, contact Joanna Yates at 205-348-8372 or cjyates@bama.ua.edu.
Since Fall 2010, nearly 600 students have created 120 public-service videos as part of a course exploring legal and ethical issues surrounding technology such as social media, the Internet and cell phones. The public-service videos educate youth, parents and the community about potential risks and dangers of technology and encourage responsible behavior. In 2012, students in CS 391 will create a website, “Right Clicks,” to share the videos and will produce short films introducing the project. The videos also will be shown to kids and parents at Tuscaloosa schools.

Video topics include over-sharing, defamation, cyber bullying and stalking, sexting, texting while driving, illegal downloading, hacking and geo-tagging. CS 340 Legal and Ethical Issues in Computing requires students to use and think about technology in often unfamiliar ways. “The most rewarding part was being able to do something different in the computer-science classroom,” said senior accounting major Marc Skipwith. “Instead of being on a computer for the whole semester, we did something to help somebody.”

Students work in teams of three to five to produce 5- to 10-minute videos. Each team is responsible for concept creation, storyboard development, script writing, filming and editing the videos. Most teams used one of nine Flip cameras computer science instructor Leslie Dixon purchased through a service-learning grant she received following her year as a UA Center for Ethics & Social Responsibility Faculty Fellow.

Dixon said the videos’ format will be relatable for children, teens and even parents.

“The videos are informative and made in ways that will stick in the viewers’ minds so they might be more thoughtful in what information they include on social networks,” said senior history major Deborah Hastings. “The videos are a lot of times funny, but with a serious message in the end.”

In addition to educating target audiences, students learned to evaluate their own use of technology and social media.

“I learned the real dangers of Facebook and Twitter,” said Skipwith, whose team created a video about the dangers of posting personal location on the Internet.

Students said the most important aspect of their project is the influence their videos could have on the lives of viewers. “We think our video can benefit the community by dispelling misconceptions they may have and teach them ways they can protect themselves,” said Spencer Carter, a senior majoring in philosophy and mathematics whose team created a video about cyber hacking.

Senior biology major Richard Zhou said his team’s video explained the potential dangers of the Internet while holding viewers’ attention. “One of our group members had a negative experience with anonymous blogging, and we really wanted everyone else to realize the risks.”

To learn more about CS 340 Legal and Ethical Issues in Computing or CS 391 Special Topics, contact Leslie Dixon at ldixon@cs.ua.edu or 205-348-1663.
The mission of the Tuscaloosa Pre-K Initiative is to identify the city’s academically at-risk, 4-year-old children who are not served through other programs, and provide them and their families the best health and education services possible.

Through the nine-month, full-day Pre-K program UA students become part of a nationally unique collaboration between the University and local schools to help ensure children enter kindergarten healthy and ready to learn.

In the 2010-2011 academic year, more than 70 UA students were regularly involved in the Pre-K initiative as academic assistants and health-service providers as part of numerous service-learning courses. By serving alongside Pre-K teachers in daily classroom activities, education and human development majors gain real-world experiences and resources to use in their future careers.

“The opportunity to make a difference in the life of a child who is potentially at risk for a developmental delay inspired me to serve with the Pre-K Initiative,” said Quintana Kagha, a senior majoring in human development and family studies.

“The most valuable experience that I have had while serving with the program was being able to observe children overcome academic and social obstacles. Words cannot express how rewarding it is to watch a child’s confidence sky rocket as he grasps a concept.”

Students from the Capstone College of Nursing, in conjunction with the UA Student Health Center, provide free physical examinations. In the past four years, nursing students have screened more than 1,200 children, finding numerous conditions they referred to physicians, dentists or social workers. Other health screenings include the FocusFirst high-tech vision screening initiative sponsored by the UA Center for Ethics & Social Responsibility.

In the 2010-2011 school year alone, vision problems were diagnosed in more than 15 Pre-K students. Children with vision problems receive free or subsidized follow-up care through FocusFirst partner Sight Savers of America.

Additionally, the UA Speech and Hearing Center provides individualized language and speech therapy to children who need it.

“The Tuscaloosa Pre-K Initiative develops the minds of pre-school children and gives them a strong foundation for learning,” said DeAundra Ford, who graduated from UA in 2011 with a degree in human development and family studies. “I am so grateful to have had the opportunity to work with an organization that is changing so many lives.”

For more information about the Tuscaloosa Pre-K Initiative, contact Lindsey Thomas at lthomas@ualan.ua.edu or 205-348-6491.
One-year fellowship provides service-learning training, support to faculty members

A unique opportunity was introduced to The University of Alabama faculty in fall 2007. The Faculty Fellows in Service-Learning Program debuted as the first campus-wide effort to bring together an interdisciplinary group of educators for the purpose of developing new service-learning courses. What began as a series of workshops to train faculty members in the pedagogy of service learning quickly transformed into something more.

“It’s like a service-learning support group where you know everyone is as passionate about it as you are,” says Teri Henley, instructor in advertising and public relations and faculty coordinator of the program. “Faculty Fellows provides participants the tools to serve community agencies like Turning Point, which assists victims of domestic violence and sexual assault, and Tuscaloosa’s One Place, a family resource center. Students consult with the client, decide on a project, estimate the cost of the project and complete it. At the end of the project, students produce a report detailing hours spent, resources used (software, computer, etc.), and determine whether they would have made a profit based on their initial price estimate.

Tammy Carroll, Adjunct Faculty, Psychology

PY 461 Child Psychology examines the psychological, biological and social development of children with an emphasis on identifying risk and protective factors. Each student picks a site to complete his/her service-learning experience and spends a minimum of three hours per week for 10 weeks observing, engaging and listening to others from various backgrounds. At the end of the semester, students give presentations, including snapshots and/or reflections of what they observed and learned from their experiences. PY 491 Seminar in Applied Behavior Analysis involves a similar, but more elaborate, experience.

Meredith Cummings, Instructor, Journalism

JN 436/536 Teaching of Journalism students assist advisors in K-12 schools with newspapers, yearbooks, literary magazines, websites and broadcast stations. In years past, these students (both education and journalism students) have learned the process of doing these things, but through service learning they actively participate in facing the challenges and seeing the triumphs teachers and students experience while putting together student publications, whether in the form of lesson plans or dealing with larger issues like censorship.

George Daniels, Associate Professor, Journalism

MC 413 Communication and Diversity focuses on diversity in order to produce media practitioners who are aware of their roles in creating media products that reflect multicultural audiences. In the Spring 2010 semester, students worked in teams to produce media products for the Alabama Department of Public Health, Tuscaloosa’s Hope Initiative and Birmingham’s Parents Against Violence.

Susan Daria, Instructor, Advertising and Public Relations

APR 419 Public Relations Development focuses on the development of ideas, strategies and visual executions as related to the practice of public relations. The course is a combination of lectures, assignments and service. Using knowledge from previous communication coursework, students develop, plan, promote and evaluate an original fundraiser for Alabama Credit Union’s Secret Meals for Hungry Children program.

Catherine Davies, Professor, English

ENG 466/525 Dialogue engages linguistics students learning about varieties of American English with adult community members who are working to overcome functional illiteracy. The program is mediated through the Literacy Council of West Alabama. Students begin by reflecting on their own taken-for-granted literacy and researching the concept of “functional illiteracy.” Working under the guidance of literacy volunteers, students record stories from adult students as examples of Southern American vernacular English and assist in using the stories both to help with literacy development and to explore strategies for changing public attitudes surrounding the problem of functional illiteracy.

Amy Dayton-Wood, Assistant Professor, English

ENG 419 Special Topics in Writing students teach high school students to conduct oral history research and mentor the students as they work on these projects. UA students teach techniques for interviewing and researching local topics and serve as writing tutors for Bryant High School students. In spring 2010, Bryant students interviewed local Vietnam veterans, Tuscaloosa civic leaders and family members who lived through important historical moments of the 20th century. All students participate in an end-of-semester exhibition in which they present their projects to a public audience.

responsibility and engagement within their students. The workshops cover theories, implementation and assessment of academic service learning and how to integrate this methodology into courses across disciplines. Fellows receive a modest service-learning enhancement grant to support course development, as well as one-on-one assistance during the development process.

Faculty members emerge from the program with a completed syllabus and plan of action for their new or enhanced course.

The Faculty Fellows in Service-Learning Program has led to an increase in the number of course opportunities for students, a greater number of meaningful partnerships between the university and the community and a more entrenched institutional presence for service learning as a critical component of The University of Alabama experience.

In the past two academic years, Faculty Fellows have developed the following courses:

Diane Bridgewater, Instructor, Human Nutrition and Hospitality Management

RHM 285 Food Safety and Risk Management teaches principles and techniques used in managing sanitation, safety and security functions in food service operations. The course requires students to visit 20 restaurants and report each restaurant’s last inspection score or visit five restaurants and perform one mock inspection. Students also offer food-safety training to financially struggling day-care facilities and perform mock inspections at these facilities.

Marcus Brown, Associate Professor, Computer Science

CS 491 Computer Consulting for Fun & Profit teaches students to work as independent computer consultants, requiring them to serve community agencies like Turning Point, which assists victims of domestic violence and sexual assault, and Tuscaloosa’s One Place, a family resource center. Students consult with the client, decide on a project, estimate the cost of the project and complete it. At the end of the project, students produce a report detailing hours spent, resources used (software, computer, etc.), and determine whether they would have made a profit based on their initial price estimate.

The 2010-2011 Faculty Fellows class with Judy Bonner (right), UA provost, and (left) Teri Henley, faculty coordinator of the program, and Stephen Black, director of the UA Center for Ethics & Social Responsibility

The 2010-2011 Faculty Fellows class with Judy Bonner (right), UA provost, and (left) Teri Henley, faculty coordinator of the program, and Stephen Black, director of the UA Center for Ethics & Social Responsibility
Many applications, including monitoring and processing for target tracking, undergird the civil rights movement. Students partner with a local black church to tell its history under segregation. They then partner with a local black church to tell its history under segregation. Students create a demographic profile of church to tell its history under segregation. Students transcribe years, track down newspaper reports and integrate humanities, philosophy, literature and psychology, and students meet weekly to report progress and share experiences.

**Qi Hao, Assistant Professor, Electrical & Computer Engineering**

ECE 482 Computer Vision and Image Processing introduces modern computer vision and digital image processing techniques with emphasis on image acquisition, representation and processing for target tracking and pattern recognition. The video-camera-based computer vision technology has many applications, including monitoring and security, which are utilized in this service-learning project. Students work with community partners in using computer vision technology to improve service quality for nonprofit day care of children from low-income families. Through developing computer vision systems to meet community needs, students are expected to better understand how technology can be utilized to meet societal responsibilities.

**Rebecca Howell, Assistant Professor, Criminal Justice**

CF 490 Applied Delinquency Theory is an upper-level, service-learning elective designed to provide students a structured and guided opportunity to link and reflectively translate risk, protection and delinquency theory at the abstract level to the “real world” of delinquency prevention. The students’ service-learning experiences with community partner Tuscaloosa’s One Place will inform and be informed by the in-depth study of the etiology and prevention of juvenile delinquency.

**Nicholas Kraft, assistant professor of computer science, leads CS 250 Programming II students in teaching kids at Cottondale Elementary School to build computers.**

**Michael Inmee Jimenez, Assistant Professor, American Studies**

AMS 430 Immigration and Ethnicity: Latinos in the American South examines the Latino immigrant journey and immigrant life in the American South. Through the community-based service-learning project, along with a combination of lectures, discussions, readings, films and speakers, this course helps students better understand the historical and contemporary issues that confront immigrants and their communities. As part of the service-learning component of the course, students interact with members of local immigrant communities through Tuscaloosa-area organizations or agencies that assist immigrants.

**Kim Lackey, Adjunct Faculty, Biological Sciences**

BSC 393 Biological Outreach students partner with Tuscaloosa’s One Place to provide hands-on science learning experiences to students in Tuscaloosa-area schools. The two-credit hour class offers students an opportunity to: learn to mentor children; prepare a well-designed, active learning project; develop effective written communication skills; and work with peers. Teaching requires them to express their thoughts aloud in a concise, understandable manner and become more comfortable speaking in public — important skills that will benefit students in their careers.

**Rebecca Howell, Assistant Professor, Criminal Justice**

CF 490 Applied Delinquency Theory is an upper-level, service-learning elective designed to provide students a structured and guided opportunity to link and reflectively translate risk, protection and delinquency theory at the abstract level to the “real world” of delinquency prevention. The students’ service-learning experiences with community partner Tuscaloosa’s One Place will inform and be informed by the in-depth study of the etiology and prevention of juvenile delinquency. In addition to traditional strategies and approaches, this course incorporates a service-learning project that invites history/social studies teachers of tomorrow to become actively engaged in studying, promoting, preserving and celebrating Alabama’s rich civil rights history by recording and presenting experiences of local and regional “foot soldiers” and other civil rights movement participants.

**Nancy Payne, Instructor, Social Work**

SWF 320 Volunteerism in Human Services creates a wide range of opportunities for students to volunteer in human and social service agencies. Each student develops an individualized service-learning activity plan that includes 60 volunteer hours. Students gain an understanding of issues surrounding diversity and populations in need by developing relationships with community members from different backgrounds and situations. Focus is placed on development of mutual respect, the call to social responsibility and local community involvement.

This is an elective open to all majors.

**William Petty, Clinical Instructor, Information Systems, Statistics and Management Science**

OM 487/597 Operations Management Capstone Project helps operations-management students address the design, operation and continuous improvement of business operations that produce and deliver products and services. The service-learning component of the course trains students in the effective application of OM industrial and manufacturing systems principles by addressing an actual industrial or service problem in a manufacturing facility, distribution facility or community-based service agency in the Tuscaloosa area.

**Ariane Prohaska, Assistant Professor, Criminal Justice**

SOC 490 Gender and Poverty students participate in a semester-long service project with the Alabama Women’s Resource Network. The goal is for students to present research on the financial situations of women who are about to be released from prison. They will present this information to a group of influential community leaders and policymakers. Students will come up with a plan, based on research and interviews with women offenders, to help reduce the debt many women in prison accumulate before and during their incarceration.

**Tracy Sims, Adjunct Faculty, Advertising & Public Relations**

APR 332 Public Relations Writing presents the theory and practice involved in creating public relations messages, including planning, writing, editing, production and evaluation. Students are assigned to a nonprofit organization partner and work individually and in groups to develop writing projects that meet the public-relations needs of the organization.

**Lu Tang, Assistant Professor, Communication Studies**

COM 300 Human Communication Research addresses empirical research methods, including surveys, experiments, content analysis, ethnographies and focus groups. Students create their own digital stories and develop an understanding of how to use digital media and the arts to create opportunities for personal reflection and civic engagement across diverse communities and contexts. Students have opportunities to assist middle and high school students with creating and exhibiting digital stories for a variety of audiences.
Students work in teams to design and implement research projects focused on solving community issues and providing community service.

Libba Woodruff, Clinical Instructor, Kinesiology
KIN 468 Adapted Physical Education
students apply academic knowledge of conditions, diseases and injuries that might require adaptations in physical activities through field experience with Crossing Points, an organization that provides transition services for young adults (ages 18-21) with disabilities. The course emphasizes the importance of inclusion while focusing on health and fitness instruction. Students practice adapting fitness principles, health concepts and fundamental skill development for Crossing Points participants. In Spring 2011, the class partnered with Crossing Points to host the 2011 Tuscaloosa Olympiad.

STEPHEN F. BLACK
DIRECTOR, CENTER FOR ETHICS & SOCIAL RESPONSIBILITY
Stephen Foster Black has directed the UA Center for Ethics & Social Responsibility, which houses the Faculty Fellows in Service-Learning Program, since the Center’s founding in 2005. Grandson of U.S. Supreme Court Justice Hugo L. Black, Stephen also is founder and president of Impact: An Alabama Student Service Initiative, the state’s first nonprofit organization dedicated to developing and implementing substantive service-learning projects in coordination with more than 20 universities and colleges throughout the state.

Black earned a bachelor’s degree from The University of Pennsylvania in 1993 before attending Yale Law School, where he graduated in 1997. After three years in private practice at Maynard, Cooper & Gale in Birmingham, he spent a year as an assistant to the governor of Alabama, researching policy issues and working on economic development projects. In 2008, Black was named one of 10 recipients – out of more than 800 nominations nationwide – of the prestigious Robert Wood Johnson Foundation Community Health Leaders Award for creating the FocusFirst vision screening initiative.

Contact Black at stephen.black@ua.edu.

TERI K. HENLEY
FACULTY FELLOWS IN SERVICE-LEARNING COORDINATOR
Teri Henley has more than 25 years’ experience in the academic and nonprofit communications field. Since joining the University of Alabama faculty in 2007, she has worked with more than 20 community partners on service-learning activities. In Spring 2009, she served as adviser for the UA Advertising Team, which developed a social marketing campaign and won second place national honors in the American Advertising Federation National Student Advertising Competition.

Before joining the University of Alabama faculty, Henley spent 15 years at Loyola University New Orleans where she was associate professor and chair of the Communications Department and director of the Shawn M. Donnelley Center for Nonprofit Communications. Her work through the Center gave her the opportunity to supervise more than 300 projects for nonprofit clients. She is author of 21 articles and three book chapters in the field of nonprofit communications, which is her research and teaching passion.

Henley can be contacted at henley@apr.ua.edu.

Using a chess demo board, UA student Matt Tucker shows Tuscaloosa Magnet Middle School student Jacob Fitch how to make a smart move (story page 14).