



Post-Secondary Nominee Presentation Form

ELIGIBILITY CERTIFICATIONS

College or University Certifications

The signature of college or university President (or equivalent) on the next page certifies that each of the statements below concerning the institution's eligibility and compliance with the following requirements is true and correct to the best of their knowledge.

1. The college or university has been evaluated and selected from among institutions within the Nominating Authority's jurisdiction, based on high achievement in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental and sustainability education.
2. The college or university is providing the U.S. Department of Education Office of Civil Rights (OCR) access to information necessary to investigate a civil rights complaint or to conduct a compliance review.
3. OCR has not issued a violation letter of findings to the college or university concluding that the nominated college or university has violated one or more of the civil rights statutes. A violation letter of findings will not be considered outstanding if OCR has accepted a corrective action plan to remedy the violation.
4. The U.S. Department of Justice does not have a pending suit alleging that the college or university has violated one or more of the civil rights statutes or the Constitution's equal protection clause.
5. There are no findings by Federal Student Aid of violations in respect to the administration of Title IV student aid funds.
6. The college or university is in good standing with its regional or national accreditor.
7. The college or university meets all applicable federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

U.S. Department of Education Green Ribbon Schools Postsecondary 2015-2018

☒ Public 4-Year ☐ Public 2-Year ☐ Private Non-Profit

Name of President/Chancellor: Ray L. Watts. M.D.

(Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in the official records)

Official College or University Name: University of Alabama at Birmingham

(As it should appear on an award)

College or University Street

Mailing Address: 1720 2nd Avenue South, Birmingham, Alabama 35294

(If address is P.O. Box, also include street address.)

County: Jefferson IPEDS Number*: 100663

Telephone: 205-934-4636 Fax: 205-975-8505

Web site/URL: www.uab.edu E-mail: president@uab.edu

*Integrated Postsecondary Education Data System

I have reviewed the information in this application and certify that to the best of my knowledge all information is accurate.

Ray L. Watts
(President's/Chancellor's Signature)

Date: January 26, 2017

Nominating Authority's Certifications




The signature by the Nominating Authority on this page certifies that each of the statements below concerning the college or university's eligibility and compliance with the following requirements is true and correct to the best of the Authority's knowledge.

1. The college or university has been evaluated and selected from among institutions within the Nominating Authority's jurisdiction, based on high achievement in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental and sustainability education.
2. The college or university meets all applicable federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

Name of Nominating Agency: Alabama State Department of Education

Name of Nominating Authority: Mr. Michael Sentance
(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

I have reviewed the information in this application and certify to the best of my knowledge that the school meets the provisions provisions above.

 _____ Date: 1-31-17
(Nominating Authority's Signature)

SUMMARY AND DOCUMENTATION OF NOMINEE'S ACHIEVEMENTS

Provide a coherent summary that describes how your college or university is representative of your jurisdiction's highest achieving green school efforts. Summarize your strengths and accomplishments in all three Pillars and their underlying Elements. Then, include concrete examples for work in every Pillar and Element. Only institutions that document progress in every Pillar and Element can be considered for this award.

See Summary narrative of application

SUBMISSION

The nomination package, including the signed certifications and documentation of evaluation in the three Pillars should be converted to a PDF file and emailed to green.ribbon.schools@ed.gov according to the instructions in the Nominee Submission Procedure.

OMB Control Number: 1860-0509

Expiration Date: March 31, 2018

Public Burden Statement

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. The valid OMB control number for this information collection is 1860-0509. Public reporting burden for this collection of information is estimated to average 37 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. The obligation to respond to this collection is required to obtain or retain benefit P.L. 107-110, Sec. 501, Innovative Programs and Parental Choice Provisions. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the U.S. Department of Education, 400 Maryland Ave., SW, Washington, DC 20202-4536 or email ICDocketMgr@ed.gov and reference the OMB Control Number 1860-0509. Note: Please do not return the completed ED-Green Ribbon Schools application to this address.

ED-GRS Application for Colleges and Universities

Contact Information

College/University Name: University of Alabama at Birmingham

Street Address: 1720 2nd Ave South

City: Birmingham State: AL Zip: 35233

Website: www.uab.edu Facebook page: www.facebook.com/UAB.edu/

President/Chancellor Name: Dr. Ray L. Watts

President/Chancellor Email Address: rlwatts@uab.edu Phone Number: (205) 934-4636

Lead Applicant Name (if different): Bambi L Ingram

Lead Applicant Email: blingram@uab.edu Phone Number: (205) 975-3659

Contact person for state and national notification:

Name: Julie Price, Sustainability Manager Email: Juliegp@uab.edu

Phone Number: (205) 996-5362

Basic Carnegie Classification	Doctoral Universities: Highest Research Activity	Minority-Serving Institution (check all that apply): AANAPISI _____ ANNH _____ HBCU _____ HSI _____ NASNTI _____ PBI _____ TCU _____
Enrollment Profile	Size and setting Undergraduate Enrollment: <u>12,369</u> Graduate Enrollment: <u>7,166</u> Percent of Undergraduates Receiving Pell Grants: <u>34.4</u>	Graduation rate (150% of normal time): <u>82.7</u> Average Institutional Net Price: <u>\$9,936</u>

1. Is your college or university participating in a local, state or national program which asks you to benchmark progress in some fashion in any or all of the Pillars?

(X) Yes () No Program(s) and level(s) achieved:

- Sustainability Tracking, Assessment and Rating Systems (STARS) - Silver benchmark achieved
- Energy Star Portfolio Manager

2. Has your college or university received any awards for facilities, health or environment?

(X) Yes () No Award(s) and year(s) Tree Campus USA (2014, 2015)



Summary Narrative: Provide a narrative describing your institution’s efforts to reduce environmental impact and costs; improve student and staff health; and provide effective environmental and sustainability education. Focus on unique and innovative, yet replicable, practices and partnerships. Be sure to cover every ED-GRS Pillar and Element.

It is our vision at the University of Alabama at Birmingham to embed sustainability as a fundamental value through the development of sustainability literacy, solutions, and leadership. This emphasis will galvanize UAB and surrounding communities around an enduring transformation into a more resilient campus and community. It is our intention, whenever possible, to serve as a “living laboratory” in which the built environment is not only a backdrop of university life, but an integral component of multidisciplinary study and outreach, addressing issues relevant to human health, ecosystems, and resource use.

UAB’s Sustainability program characterizes sustainability as “meeting the needs of the present without compromising the ability of future generations to meet their own needs.” Consisting of three pillars, sustainable activity seeks to achieve, in a balanced manner, economic development, social stability and environmental protection. UAB is an urban campus of more than 170 classroom, office, research, and hospital buildings, including about 16 million square feet of space spanning more than 90 city blocks. We are the largest single-site employer in Alabama, the largest electricity user in the state, and the single-biggest contributor to Birmingham’s economy. At UAB, we strive to include sustainability in every facet of our enterprise: education, research, patient care, economic development, and service. A complete view of UAB’s sustainability efforts can be found in the Association for the Advancement of Sustainability in Higher Education’s Sustainability Tracking, Assessment, and Rating System (STARS). UAB recently attained a Silver rating through STARS.

The University is actively working to reduce environmental impact and costs by assessing its current energy use and costs, using up-to-date energy efficient technology and systems, incorporating renewable energy into the overall energy platform, and dedicating attention and resources to smart systems that prevent waste of construction materials, energy, water, food, and materials. UAB Energy Management’s work (beginning in 2008) to incorporate building temperature setbacks, lighting upgrades, and building retro-commissioning programs has resulted in savings of \$13.6 million in 2015-16 and an anticipated savings of \$18.2 million in 2016-17.

UAB is home to prestigious centers for the study of cancer, neuroscience, AIDS, diabetes and more, and excels at translating medical discoveries in the lab to revolutionary therapies in one of the nation’s largest academic medical centers. Professionals at UAB Medicine use that knowledge to provide the highest quality care to more than one million patients annually in America’s third-largest hospital and its affiliated clinics. As such, UAB also takes great pride in its care of students, faculty, and staff. Our student and employee wellness programs provide extensive services in support of mental and physical well-being for the twenty-two thousand staff and twenty thousand students who work, live, and study here.



The University's strategic plan, UAB21, is our pledge to prepare our students and community for the challenges of a new world economy: global literacy, biotechnology and biomedical science, energy, transportation, materials engineering, information technology, computing security and entrepreneurship. The UAB academic program supports 35 courses that are specifically designated as (SUS) in the course catalog: these are courses with a sustainability component designated with SUS following the course title. Such courses integrate sustainability through a disciplinary lens, empowering students to investigate relationships among social, environmental, and economic sustainability issues. UAB Sustainability anticipates designating another forty (SUS) courses within the next year.

UAB offers a major in Public Health with an Environmental Health focus, and minors in Peace, Justice and Community Health, and Environmental Science. UAB also provides numerous academic opportunities for students to absorb the fundamental principles of sustainability, including such projects as —

- Physiology and ecology faculty and students conducting research in Antarctica, investigating chemical defences of marine life and the role these could play in prevention of diseases such as heart disease, cystic fibrosis, cancer and AIDS.
- Students at the Center for Urban Education examining the lagging performance of urban schools, devising ways to address the myriad social issues. These efforts included an NSF-funded project to teach innovative methods of middle-school math instruction.
- The campus-wide effort of students, faculty, and staff to design and construct a 1,000 square foot net-zero, solar-powered home for competition in the Department of Energy's Solar Decathlon 2017 in Denver, Colorado. Students of all disciplines are working together with professionals in the field to develop engineering, communications, and construction strategies for a competition-winning home.

Pillar I: Reduced Environmental Impact and Costs

***Narrative:** Describe how your college or university is reducing environmental impact and costs by reducing or eliminating greenhouse gas emissions; improving water quality, efficiency, and conservation; reducing waste production; and using alternative transportation. Identify your institution's energy-efficient facilities and practices, ecologically beneficial uses of grounds, and methods of disposal for solid and hazardous wastes.*

UAB is committed to following core sustainability principles in all facets of planning and operations so that we lessen our environmental impact, ensure a healthy community, and contribute to global solutions. Targeted



policies and practices – as well as individual, everyday actions – are essential to realizing our vision of incorporating sustainability into every aspect of campus life.

The University of Alabama at Birmingham has made a commitment to reduce greenhouse gas emissions by 25% within the next decade, and in 2014 the University established a committee to plan for and institute a comprehensive energy conservation plan. The committee is working with TME, a full-service mechanical, electrical, plumbing, fire protection, structural and energy engineering firm headquartered in Little Rock, Ark. The committee's goals are to —

- Reduce Energy Consumption to Lowest 10% of Peer Institutions
- Reduce Greenhouse Gas Emissions by more than 25%
- Reduce Annual Energy Costs by more than \$15 Million
- Improve Thermal Comfort, IAQ and Occupant Safety
- Extend District Systems to New and Existing Buildings
- Single Platform Instrumentation, Control and Electronics System
- Upgrade Building Automation Systems
- Sustain Energy Savings

As of 2016, UAB Facilities has completed its initial energy assessment of all buildings and has implemented a Siemens platform for real time building automation in all properties.

Central Utilities

The central chilled water system includes 3 chilled water plants that operate 24 hours a day, 365 days a year, delivering chilled water to buildings via a 4.5-mile closed loop distribution system. Chilled water service reliability in our buildings is essential as they include sensitive research areas and acute-care hospital facilities. UAB has implemented a novel strategy to recover and utilize condensate water from the fins of air handler coils back in the chilled water loop, reducing the amount of water that must be added to the system. The recovered fin water from air handlers and groundwater from basements were both previously sent to the stormwater system. UAB adds more collection locations each year. In 2015, UAB collected over 50 million gallons of water. This reduced our demand for potable water for used in industrial applications like cooling, and saved the University more than over \$200,000.

Solar Power

The University of Alabama at Birmingham is now home to the largest solar-energy system in the city of Birmingham. The 100-panel system, installed by Birmingham's Vulcan Solar Power, sits atop the UAB Campus Recreation Center. This is not the first solar project at UAB, as UAB Energy Management installed 8 panels in 2008 to charge electric GEM cars for Facilities employees to circulate on campus emissions-free. UAB Sustainability also installed ConneCTable solar charging stations in front of the



Solar panels on Campus Rec Center



Hill Student Center on University Boulevard for charging phones and laptops outdoors while seated at the tables.

Green Labs

Research laboratory buildings use approximately three-to-five times more energy per square foot than an office or classroom. This is true for other resources as well: water, solid waste, chemicals, and electronics. Institutions across the nation are working to improve efficiency in labs, and UAB has joined this effort through its Green Labs program. The UAB Green Labs Pilot Program is a new, voluntary program designed to assist lab leadership in implementation of efficiency measures to reduce environmental and economic costs without sacrificing research quality, safety standards, or comfort and productivity of lab staff. Green Labs will serve the dual purpose of instituting sustainable practices and recognizing participants for their efforts. The program provides generalized guidelines which are applicable to a multitude of facilities with the hope that researchers may innovate and evolve additional practices based on their unique set of circumstances. UAB Sustainability, in partnership with UAB Occupational Health and Safety, is implementing a pilot Green Labs program in 2016-2017.

Land



UAB Environmental Management, in collaboration with the Alabama Department of Environmental Management, works with sellers of new property acquisitions to address any environmental contamination on the site. Existing buildings are retrofitted to remove hazardous materials like asbestos. In addition, UAB is converting many impervious surfaces, such as parking lots, roadways, and roofs of buildings, into green space with turfgrass, plants, and trees, with some designed specifically for stormwater runoff. Green space in urban areas reduces air temperature and stormwater pollution in the watershed, improves air quality, and increases habitat value, aesthetics, and recreational potential.

The University has adopted the practice of Low Impact Development (LID) in its new construction projects. LID employs principles such as preserving and recreating natural landscape features, minimizing effective imperviousness to create functional and appealing site drainage that treat stormwater as a resource rather than a waste product. By implementing LID principles and practices, water can be managed in a way that reduces the impact of built areas and promotes the natural movement of water within an ecosystem or watershed.

Reducing Food Waste: the LeanPath System

UAB Campus Dining and Restaurants has recently signed on to the LeanPath system. LeanPath is an automated food waste tracking system that allows UAB to track and measure its food waste. The LeanPath program offers a unique opportunity for raising awareness about manageable steps that we can all take toward a more sustainable food system. The system requires dining staff to collect and weigh any pre-consumer waste, that is any food that Dining has control over from leftovers, overproduction, trimming, catering, etc. LeanPath



automatically captures the date, time, and estimated value of the waste and reports this data back to UAB Campus Restaurants. The data then provides staff with the information they need to prevent overproduction and overall waste in the future. As a result of the new system, UAB stands to significantly reduce its environmental footprint. According to findings from the first eight weeks of a LeanPath pilot program at other partner sites, pre-consumer food waste was reduced by about one third. Campus Dining expects LeanPath to help reduce waste by as much as eighty percent in the next year.

Cooking Oil Recycling

UAB Campus Dining and Restaurants is working with Ventura Foods and Standard Biofuels to recycle frying oils used at UAB. The oil is converted to biofuel or blended with petroleum diesel to create biodiesel fuel. One hundred percent of all collected oil is recycled — reducing pollutants into the environment and UAB's carbon footprint. Campus Restaurants recycles approximately 16,000 pounds of cooking oil each year.

Hazardous Waste Reduction

UAB encourages a reduce, reuse, and recycle policy when dealing with hazardous materials. Monthly shipments of waste are sent in compliance with a cradle-to-grave tracking system. UAB Recycling has a no-contract, no-cost partnership with a local electronics recycler for electronic waste that is the personal property of our students and staff. UAB students and staff can drop these unwanted electronics in the recycling center dropoff area, where they are collected by staff and stored in a secure space for the weekly pickup by the electronics recycler.

Parking and Transportation

UAB Parking and Transportation offers several programs to reduce vehicle traffic on campus, which improves air quality, encourages more physical activity, and reduces noise pollution on campus. Students and employees are encouraged to apply for special carpool tags and participate in CommuteSmart (a commuter program provided by the Regional Planning Commission that offers free online ridematching, carpool and vanpool services, and an Emergency Ride Home program). UAB also provides Blazer Express, a transit system that provides transportation throughout the University campus. With a valid UAB ID badge, students, employees, and authorized visitors can enjoy fare-free bus transportation along 5 designated routes.

UAB Civil Engineering faculty Virginia Sisiopiku received a grant from the Regional Planning Commission of Greater Birmingham, in partnership with UAB Sustainability, to perform an enterprise-wide assessment of commuting patterns and preferences. Several CE undergraduates participated, through paid internships and/or course credit, in the development of the survey, distribution and collection, and analysis. This effort has been combined with a strategic planning process underway in Parking and Transportation and the results will inform many of the proposed changes in that department. In addition, the CE Senior Design class in 2015 designed a road diet strategy for a main thoroughfare through campus to transition the avenue to a "complete street." This road diet transition will begin construction in 2017, and will include many of the elements proposed by students.

Facilities Electric Car Fleet

In 2015, the UAB Facilities Management program purchased 6 Nissan LEAFs for use by its staff for travel on campus and for short regional trips. This follows the 2014 purchase of two two-seater GEM cars for use as pool vehicles; the GEM cars are recharged at night with stored solar energy provided by a dozen 200-watt, solar photovoltaic panels installed on the roof of the Facilities Administration Building garage.



Facilities GEM Car in
Homecoming Parade

Electric Car Charging

UAB is making electric car charging stations, or EVSEs available in three locations on campus, with the intention of expanding the program to five locations by 2018. The ChargePoint systems will be available to any visitor to campus. Users will need to download the ChargePoint mobile app and will pay a \$1 per hour fee. A full charge takes four hours. In order to promote UAB's charging program and support the efforts of other institutions, UAB joined the Department of Energy's Workplace Charging Challenge, an effort to increase the convenience and affordability of driving electric by encouraging employers to provide charging access for employees.

Pillar 2: Improve the health and wellness of students, faculty and staff

Narrative: Describe how your college or university improves the health and wellness of students, faculty and staff by integrating a campus-wide environmental health program and promoting sound health and wellness practices. You should discuss integrated pest management, contaminant controls and ventilation, asthma controls, indoor air quality, moisture control, and chemical management. Address the amount and type of outdoor time that your students and staff have, as well as the types of fresh, local, and organic food that they eat. Other components you may want to include are: health education, health services, counseling, psychological and social services, staff health promotion and family and community involvement.

Integrated Campus Environmental Health Program

UAB's Campus Services and Grounds maintenance program has an integrated pest management program that establishes thresholds determined by each groundskeeper for his/her area, with emphasis on pesticide application being the last resort. The program also stresses choosing insect and disease resistant varieties of plants, as well as native plants, to preclude the need for pesticide use.

Indoor Air Quality

While UAB does not currently participate in the U.S. Green Building Council's LEED building rating system, LEED standards are referenced as a guiding principle in projects, both new and renovation. In addition,



Architects, Engineers, Consultants, and Contractors are encouraged to discuss additional, specific sustainability goals for each project and to complete a Sustainable Building Design Parameter Checklist.

When a renovation project occurs at UAB, the adjacent spaces are normally occupied during construction, therefore indoor air quality management is extremely important. This includes dust control as well as noise and vibration control. The Project team shall discuss and develop a plan to manage the control of air quality during construction of the project that includes construction-designated filtration media in any permanently installed air handling equipment. While UAB specifies low-VOC carpets, paints, etc. in other standards, this air-quality management plan should also include any considerations for off-gassing periods before the building is occupied. This management plan is incorporated into the bidding and contract documents so that the contractor is aware of these requirements.

Health and Wellness

UAB sponsors comprehensive wellness programs for all staff, faculty and students. The UAB Employee Wellness program strives to cultivate, innovate and nurture a collaborative approach for the individual and corporate health of UAB employees with a focus on five major areas —

- Tobacco Cessation
- Nutrition
- Physical Activity & Recreation
- Prevention & Health Management
- Well-being

UAB students have access to a full array of health services including —

- Primary Care
- Women's Health
- Immunizations
- Allergy Care
- Prescription Services
- Wellness Screenings
- Student Counseling and Mental Health Services

Fitness and Outdoor Time

All UAB students have free access to the Campus Rec Center, a 152,000 square foot facility that offers free weights, court sports, swimming pools, group fitness classes, nutrition education, fitness areas, a climbing wall, and much more. The facility has three floors: housing four basketball/volleyball courts, five racquetball courts (one of which can be converted to squash and four for wallyball), four aerobics studios,





18,000 square feet of weight and cardio-fitness areas, game room, KidZone, aquatics center with both lap and leisure components, Center Court gym used for indoor soccer, floor hockey and badminton, Power Zone, indoor track, and a climbing wall.

The Rec also sponsors low-cost group adventure recreation trips to local and regional outdoor destinations, and rents gear for cycling, water sports, climbing and camping to all students, faculty and staff.

UAB Sustainability sponsors bike safety and bike protection programs for the campus community. Sustainability hosts an annual Bike Safety Fair, has sponsored placement of bike racks and lockers across campus, and is working with master planners to create “bike safe” routes on campus. Sustainability commissioned a bike safety video for the campus community that can be found here —

<https://www.uab.edu/sustainability/bikeuab/safety>.

Campus Dining

The Campus Dining program offers a number of programs to promote healthy eating in its facilities, including MyFitnessPal, an app that allows consumers to scan bar codes to automatically input caloric intake for any chosen dining item. Dining services menus also post nutritional info, including calories on its restaurant menus and online. Simple Servings, a safe place for any student with food allergy concerns, provides an allergen free station at the Simple Servings provides a station where food is prepared in such a way to eliminate 7 of the 8 most common FDA allergens.

UAB Medicine and UAB Wellness collaborate to sponsor weekly farmers markets at UAB hospitals and clinics throughout the year.

Water Bottle Refill Stations



Water bottle refill station

UAB Sustainability instituted a water bottle refill station program in 2015, placing 34 refill stations in buildings across campus. The intent is to provide high quality drinking water and save students, faculty and staff from having to purchase bottled water or sodas. In July 2016, student interns conducted a usage survey of each of the stations: the usage counts added up to 305,363 refills, resulting in the same number of water bottles being saved from landfills. At an estimated cost of \$1.15 per bottle, students, faculty, and staff saved \$351,167 in expenses for bottled water. UAB Sustainability advanced learning opportunities for the stations by adding educational signage about water conservation, posted information on electronic signage across campus, and collaborated with the art department in creating and limited edition print that maps the water bottle program.

Pillar 3: Effective Environmental and Sustainability Education

Narrative: *Describe how your college or university provides effective environmental and sustainability education by incorporating STEM, civic skills, and green career pathways. Provide examples of interdisciplinary learning about the key relationships between dynamic environmental, energy, and human systems. Demonstrate how your institution uses the environment and sustainability to develop STEM content, knowledge, and thinking skills. You should also discuss how your institution develops and applies civic knowledge and skills to environmental and sustainability education.*

Solar Decathlon



surviv(AL) house

The University of Alabama at Birmingham is competing as one of fourteen collegiate teams from around the world in the U.S. Department of Energy's Solar Decathlon 2017 competition. For two years an interdisciplinary team of students will be engaged in designing and building a house that is powered completely by solar energy. Inspired by the devastating impact that the 2011 tornado super outbreak had on our communities, the Alabama **surviv(AL)** house team will work to design an affordable home that will address the problem of extreme weather and the southern climate.

One of the U.S. Department of Energy's most successful outreach efforts, the Solar Decathlon helps accelerate the adoption of energy-efficient products and design by:

- Educating students and the public about the money-saving opportunities and environmental benefits presented by clean energy products and design solutions
- Demonstrating to the public the comfort and affordability of homes that combine energy-efficient construction and appliances with off-the-shelf renewable-energy systems
- Providing participating students with unique training that prepares them for the clean energy workforce

Peace, Justice and Ecology Minor

The Peace, Justice, and Ecology minor, housed in the College of Arts and Sciences, is an interdisciplinary program for students seeking a broad learning experience in human-ecological interactions, bio-cultural diversity, and strategies to foster social justice, peace, and environmental sustainability from a holistic perspective. The Peace, Justice, and Ecology studies minor offers students the opportunity to examine themes of ecological adaptation and sustainability as well as environmental health and human rights in local, cross-cultural, and global contexts, and to apply scientific, philosophical, and ethical reasoning to real-world problems.

Sustainable Smart Cities



The Sustainable Smart Cities Master's program from the University of Alabama at Birmingham (USA) and Staffordshire University (UK) is a unique professional postgraduate program that provides an inter-disciplinary grounding in the principles, application and key technologies required to develop sustainable smart cities.

Delivered by experienced faculty at both UAB and Staffordshire University, this genuinely international program equips students with the knowledge, skills and critical thinking to assess, design and implement sustainable smart cities strategies across the globe. The program offers a broad curriculum covering sustainability theory, sustainable urban development, low carbon and renewable energy systems, green infrastructure, natural resource management, health and liveability, transport and mobility, big data analytics and smart technologies

Masters in Public Health

Students pursuing the MPH degree acquire competency in the fundamental public health disciplines; the basic public health sciences; data analysis and policy analysis; communications; program planning and administration; public health systems and the organization of health services in the United States and abroad; recognition and analysis of ethical or legal issues in public health and professional practice; cultural, behavioral, genetic, environmental, political, geographic, and socioeconomic factors in health; the global nature of health and the needs of special populations, such as mothers and children, ethnic minorities, and vulnerable populations; and in the integration of core public health disciplines in public health problem decision-making processes.

The MPH concentration in Environmental Health & Toxicology studies the links between the environment and public health, studying all aspects of this process from initial exposure to toxicant action to science-based policy development. We train students to recognize and assess exposures, determine the toxicity risk to the public, and design and properly communicate strategies to reduce risk and help set appropriate policy.

Red Mountain Project

UAB's annual Red Mountain Project provides faculty from all disciplines with an opportunity to receive training in methods for incorporating sustainability as a subject matter in both new and existing courses. The Red Mountain Project requires that participants participate in a full two-day workshop, prepare a syllabus during the summer for either revising a current course or creating a new course to include sustainability elements, and report back to the group for a half-day field trip at the end of the summer. Course development funding is provided for those who complete the project.

Within the past two years 30 courses have been developed or adapted in biology, English, engineering, nursing, business, philosophy, graphic design, health and human studies, and more. Courses revised or created through the program will be assigned a sustainability course designation, listed as SUS at the end of the full course title in the course catalog.

SUS Designation



As the result of growing student interest in sustainability as a course of study, UAB determined that it would take steps to allow students to easily identify courses with elements of sustainability as a subject by identifying them with the SUS designation.

The SUS designation reads: Courses with a sustainability component are designated with SUS following the course title. Such courses integrate sustainability through a disciplinary lens, empowering students to investigate relationships among social, environmental, and economic sustainability issues.

Courses were identified through course catalog descriptions, faculty self-identification, and incorporation of Red Mountain Project courses. Courses were selected based on inclusion of social, environmental, and/or economic concepts within sustainability and from direct communications with the instructors. Inclusion of the topics could be in one of many forms: hidden curriculum, paradigm shift, new readings or content, new assignment/project, new unit, guest speakers, and/or service learning. The SUS designation will launch with spring 2017 course listings and the designation will also be reflected on the student transcripts.

Move out, Don't Throw Out

Move Out, Don't Throw Out! is a project of UAB Sustainability (a division of UAB Facilities), in collaboration with UAB Student Housing and Resident Life, and the Salvation Army of Greater Birmingham. The project is in its second year, and has now become a well-oiled machine, with Facilities Management employees assisting students and student volunteers with donating food, furnishings, cleaning supplies, household goods, electronics and other items to local Salvation Army clients. In previous years, all of these items would have filled UAB Residence Life dumpsters and would eventually be sent to the municipal landfill.



Signage for Move Out, Don't Throw Out!

Move Out, Don't Throw Out! Is held each year during the final days of Spring Term. The Salvation Army deploys their trucks to make twice-daily pick-ups of donated items, which are then transported to the central holding facility and sorted. During the course of the week, the Salvation Army alerts their clients about the availability of household items and food. Resident clients are able to acquire new or gently used bedding, clothing, lamps, ironing boards, TVs, and light furnishings, as well as unopened personal care items such as shampoo, soap, and razors. The Salvation Army estimates that approximately 5,000 pounds of items were



donated in 2016, including enough furnishings to supply twenty-two households. All items that were not claimed by resident clients were taken to the Salvation Army store for resale.

Student volunteers also man the cleaning “supplybary” areas in each hall. These are collection sites for cleaning supplies that are, instead of being thrown out, collected for reuse by all residents as they prepared their living spaces for inspection.

UAB Sustainability Fund

The UAB Sustainability Fund, a joint project of UAB Sustainability and the Office of the Assistant Vice President for Student Experience, allows students to apply for funding to promote the initiation of projects related to sustainability on campus. The goal of the program is to provide grants for endeavors that improve UAB’s sustainability and efficiency and decrease the university’s overall ecological footprint. It also aims to provide leadership opportunities for students to initiate and implement a range of sustainability programs on campus. Student driven projects that have resulted from the Sustainability Investment Fund include implementation of electric car charging stations on campus, the Water Bottle Refill Station program, the Move Out, Don’t Throw Out Project, and a comprehensive mapping program for combined community and campus mass transit routes.