

A. *Water*

- a. Studying both fresh surface and underground water systems, as well as coastal and ocean waters, and contamination
- b. Involved departments and centers include Biological Sciences (water resources), Center for Freshwater Studies (freshwater resources), Center for Sedimentary Basin Studies (ground and surface water hydrology), Chemistry (water quality), Geological Sciences (hydrological modeling and hydro-climate), Geography (surface process modeling, GIS and remote sensing, and water policy), Mathematics (computational and mathematical modeling)

B. *Health, Behaviors, and Health Care*

- a. Understanding diseases, and diseases mechanisms, spread, prevention, and intervention of behavior problems, and health disparities
- b. Involved departments and centers are Alabama Research Institute for Aging (aging), Anthropology (culture in biology, and forensic crime analysis), Biological Sciences (neuroscience, Parkinson's and chronic pain), Brewer Porch Children's Center (child adolescent and behavioral disorders), Center for the Prevention of Youth Behavior Problems (childhood aggression), Chemistry (disease mechanisms and medicinal chemistry), Communicative Disorders (physical disorders and sensory processing), Criminology and Criminal Justice (Epidemiological Criminology, HIV, and cybercrime), Gender and Race (racism and sexism research), Institute for Social Science Research (obesity and smoking prevention), Music Therapy (neonatal), Political Sciences (health disparities), Psychology (cognitive processes and deviant behavior)

C. *Energy*

- a. Focusing on energy sources and storage
- b. Involved departments are Biological Sciences (biofuels), Chemistry (clean energy and energy storage), Geological Sciences (energy exploration), Physics and Astronomy (clean energy)

D. *Biodiversity*

- a. Understanding the importance of biodiversity and preserving biological heritage
- b. Involved departments include Biological Sciences (terrestrial and aquatic species), Geography (biogeography), New College (conservation), Philosophy (science)

E. *Hazards, Disasters, and Environmental Impact*

- a. Understanding natural resources management, hazards, disasters, and environmental impact
- b. Involved departments include Biological Sciences (microbiology, aquatic biology, and natural resources), Geological Sciences (earth systems), Geography (hazards and environment impact), New College (conservation), History (social impact)

F. *Materials*

- a. Studying materials for data storage, energy storage and energy sensors
- b. Involved departments and center are Chemistry (alternative and nanostructured materials), Materials for Information Technology (MINT) Center (magnetic and alternative materials) and Physics and Astronomy (nanostructured materials)

G. *Big Data Analysis and Computational Science*

- a. Applying mathematical ideas and analysis to problems that arise from big data in the biology, chemistry, cyber security and cyber crime, and geosciences
- b. Involved departments and center include Anthropology (remote sensing), Biological Sciences (molecular and genetic analyses), Chemistry (modeling and numerical simulation), Criminal Justice (Cyber Crime and Cyber Security), Geography (GIS and remote sensing), the Institute for Social Science Research (statistical analysis), Mathematics (modeling and computational mathematics), and Physics and Astronomy (astronomical data analysis, computer simulations)

H. *High Energy*

- a. High energy experimental physics
- b. Involved department includes Physics and Astronomy (high energy collision and new particles, collaboration at CERN)

I. *Digital Humanities*

- a. Understanding how technology provides a new platform for the practice of scholarship
- b. Involved departments include: American Studies (Scottsboro recreated), Art and Art History (web-based learning environment as a *creativity enhancing tool*), Communicative Disorders (autism), English (Strode, EDI), History (searchable databases), Modern Languages and Classics (Spanish Literature), New College (African-American urban renaissance), Religious Studies (social media)

J. *Southern Studies*

- a. Understanding social, cultural, and economic history and change in the Southern region of the U.S.
- b. Involved departments and center include: American Studies (literature, Latino migration), Anthropology (Archaeology of Complex Societies of the Southeast), Art and Art History (architecture), Criminal Justice (stigma in the Black Belt), English (literature; linguistics; social commentary), History (southern history), Music (ethno musicology), Political Science (southern politics), Summersell Center for the Study of the South (southern history)

K. *Fine and Performing Arts*

- a. Understanding the visual art forms and expression in society
- b. Involved departments include: American Studies (popular music studies), Art and Art History (all studio arts and criticism), English (creative writing), Music (classical and jazz, opera; audio recording), New College (composing), Theatre and Dance (drama and musical theatre, dance)

L. *Cultural Studies*

- a. Understanding the political, cultural, and historical context of everyday life
- b. Involved departments and center include: American Studies (popular culture and sports), Anthropology (food insecurities), Art and Art History (Paul Jones Collection of American Art and Asian art), Criminal Justice (human trafficking), English (creative writing; social commentary), Gender and Race Studies (LGBTQ and race issues), History (consumer culture), Institute for Social Science Research (gender & STEM disciplines), Modern Languages and Classics (classics and cultural courses), New College (urban renaissance), Political Science (U.S. aid and disasters), Psychology (juror behavior), Religious Studies (Asian Studies), Theatre and Dance (theatrical history; literature)

M. *Global Connections*

- a. Understanding international collaborations, education, and research to ensure the overall strength of the U.S. across disciplines throughout the world; Faculty-to-Faculty Collaborations (China, Cuba, Ghana, Greece, Tanzania)
- b. Involved departments include: American Studies (Latino migration), Anthropology (Latin America and the Caribbean), Criminal Justice (suicidal terrorism, dark web), Gender and Race Studies (African diaspora and feminism), History (war, migration, and society), Modern Languages and Classics (language and culture study abroad), Philosophy (morals of the global community), Political Science (international conflict and cooperation), Theatre and Dance (Cuba collaboration)

N. *Communication and Civic Engagement*

- a. Understanding the role of individual and collective actions that address issues of public concern
- b. Involved departments include: Alabama Research Institute for Aging (long-term care), American Studies (museums for social purposes), Criminal Justice (prison policy), Gender and Race Studies (the study of social change and conflict), History, Political Science (health care policy), Psychology (nursing home policy), the Institute for Social Science Research (health care & safety policy), Philosophy (social critique/terrorism), Religious Studies (genocide)