**TENNESSEE STATE UNIVERSITY**

**College of Agriculture, Human and Natural Sciences**

**STRATEGIC PLAN**

**2009-2014**

**MISSION STATEMENT**

The College of Agriculture, Human and Natural Sciences fosters and integrates teaching, research, and extension. By providing quality science-based education, the College enables individuals of diverse backgrounds to achieve advancements within family, food, agricultural chemical, and biological systems thereby improving lives in Tennessee, the nation, and the global society.

**VISION**

The College of Agriculture, Human and Natural Sciences will:

Offer a differentiated, relevant, and rigorous curriculum to provide students with a high quality education that equips them for the demands and opportunities of the 21st century.

Cultivate an environment that values human capital while encouraging productivity and accountability.

Help ensure the university’s transition into a prominent research institution by achievingnational and international prominence in research and the dissemination of science-based knowledge to enhance food, agricultural and human systems.

**DESCRIPTION OF THE COLLEGE**

The College of Agriculture, Human and Natural Sciences is the premier land-grant unit of Tennessee State University. As such, the College has a mandate to not only educate the students in our classrooms, but to reach out to the population of Tennessee and provide the research, education and training necessary for our citizens to lead healthy, productive lives. We are unique at TSU by having a physical presence in 24 counties in the State, where our staff of professionals address the needs of Tennessee’s men, women and children through our extension programs and research facilities. We maintain a long-term goal of establishing a presence in all 95 counties.

The College currently undertakes its teaching, research and extension functions through four academic departments, the Department of Agricultural and Environmental Sciences, the Department of Biology, the Department of Chemistry, and the Department of Family and Consumer Sciences. Degrees and concentrations offered are:

**B.S. in Agricultural Sciences**

   With concentration in:

   Agribusiness

   Agricultural and Extension Education

   Animal Science/Pre-Veterinary Medicine

   Applied Geospatial Information Systems

   Food Technology

   Plant and Soil Science

**M.S. in Agricultural Sciences**

   With concentration in:

   Agribusiness

   Agricultural and Extension Education

   Animal Science

   Plant and Soil Science

**Ph.D. Biotechnology Concentration**

**Graduate Certificate in Applied GIS**

**B.S. in Biological Sciences**

   With concentration in:

   General Biology

   Cellular and Molecular Biology

   Biology with Teacher Certification

   Pre-Medicine, Pre-Dentistry, Pre-Pharmacy Programs

**M.S. in Biological Sciences**

**Ph.D. in Biological Sciences**

**B.S. in Chemistry**

   With concentration in

   Professional Chemistry

   Biochemistry

   Chemistry

   Chemistry with Teacher Certification

**M.S. in Chemistry**

**B.S. in Early Childhood Education (preK-3 certification)**

**B.S. in Family and Consumer Sciences**

   With concentrations in:

   Child Development and Family Relations

   Design

   Fashion Merchandising

   Family and Consumer Sciences Education

   Foods and Nutrition (Dietetics)

   Food Service Management

   Family Financial Planning Certification (6 courses)

Our faculty are among the leaders at TSU in extramural funding and publications in first-tier journals. In addition to providing expert instruction to our students, faculty in the College advance and disseminate scientific knowledge in priority areas that are closely aligned with the strategic goals of the National Institute of Food and Agriculture, National Science Foundation, National Institutes of Health and the Tennessee State University Strategic Plan. Our priorities include:

• Plant and Animal Production

• Renewable Energy (feed stocks)

• Climate Change

• Health and Nutrition

• Food Safety

• Nursery Production

• Family, Youth, and Community Development

The largest research unit in the College is the Institute for Agricultural and Environmental Research, it conducts relevant, cutting-edge research in National Institute of Food and Agriculture priority areas; in addition, state-of the art research is conducted in the departments of Biology and Chemistry. The Cooperative\ Extension Program conveys research findings in our priority areas to limited-resource families, small-scale farmers, individuals, and other groups and organizations within the rural and urban communities. Research, outreach and student experiential learning are performed in on-campus state of the art facilities and at our two off-site research facilities in Cheatham and Warren counties.

To achieve our mission and vision, the existing academic programs in the College have been reorganized to meet the demands of employers of the 21st century in a bio-economy. Our reorganization was uniquely accomplished using faculty-led focus groups to determine the best, most relevant curriculum for our students. These focus groups are permanent fixtures in the College, to provide continual improvement and adjustment to keep our curriculum innovative and applicable to the needs of the workplace.

**GOALS**

I. Increase enrollment, retention, graduation, and professional placement of traditional and non-traditional students.

II. Strengthen current programs and develop and promote new programs in teaching, research, and extension that are relevant to stakeholders’ needs.

III. Strengthen engagement and communication with stakeholders.

IV. Strengthen and develop international programs and partnerships to better prepare faculty and students for working within a global society.

V. Embrace innovative technologies and concepts to advance teaching, research, and extension.

VI. Promote diversity among students and faculty in the College.

VII. Enhance the resources of the College.

**GOALS AND OBJECTIVES**

Goal I. Increase enrollment, retention, graduation, and professional placement of traditional and non-traditional students.

Objectives:

A. Develop and implement innovative approaches to strengthen recruitment activities and increase enrollment.

Action Strategies:

• Involve faculty, staff, students, and alumni in recruitment and retention efforts.

• Establish relationships and provide workshops for high school and community college faculty and counselors.

• Provide hands-on special programs and workshops for high school and community college students.

• Increase the visibility of the College on and off campus.

• Increase scholarship opportunities through alumni and private sector involvement.

• Increase the number of graduate assistantships.

• Increase the number of work-aid opportunities to provide financial assistance and training for undergraduate and graduate students.

• Increase course offerings using alternative delivery methods to attract non- traditional students.

Success Indicators:

• Involvement of faculty, staff, students, and alumni in recruitment and retention efforts.

• Workshops for high school and community college faculty and counselors are established.

• Increased visibility of the College on and off campus.

• Increased scholarship opportunities through alumni and private sector involvement.

• Increased graduate assistantships.

• Increased work-aid opportunities to provide financial assistance and training for undergraduate and graduate students.

• Increased course offerings using alternative delivery methods to attract non-traditional students.

B. Surpass the Tennessee Board of Regents and the Tennessee State University

Academic Master Plan minimum graduation standards for all academic programs. Action Strategies:

• Increase efforts to retain and graduate students through enhancing mentorship,

Undergraduate Research Programs, and by fostering awareness of support services provided through College and University programs.

• Increase scholarship opportunities through alumni and private sector involvement.

• Increase the number of graduate assistantships.

• Increase the number of work-aid opportunities to provide financial assistance and training for undergraduate and graduate students.

• Increase course offerings using alternative delivery methods to attract non- traditional students.

Success Indicators:

• Increased number of students graduating under each degree program in the

College.

• Increased number of student completing certificate programs in the College.

• Increased mentorship, Undergraduate Research Programs, and awareness of support services provided through College and University programs.

• Increased scholarship opportunities through alumni and private sector involvement.

• Increased graduate assistantships and work-aid opportunities for undergraduate and graduate students.

• Increased course offerings using alternative delivery methods.

C. Placement of graduates in appropriate fields of employment and post-graduate studies.

Action Strategies:

• Assist graduating students in securing professional positions appropriate to their field of study.

• Assist students in pursuing graduate education. Success Indicators:

• Students placed in professional positions appropriate to their field of study.

• Increased number of students placed in post-graduate programs.

Goal II. Strengthen current, and develop and promote new programs in teaching, research, and extension that are relevant to stakeholder needs.

Objectives:

A. Identify and provide adequate support for existing programs and develop emerging areas of excellence.

Action Strategies:

• Monitor industry, market, and societal trends to identify emerging areas.

• Continually assess, evaluate, and update undergraduate and graduate curricula.

• Engage and solicit industry, alumni, and other stakeholders in program review and development.

Success Indicators:

• The degree to which industry, market, and societal trends are implemented to evaluate and update teaching, research, and extension programs.

• The degree to which industry, alumni, and other stakeholders are engaged.

B. Promote an environment that supports excellence and fosters achievement.

Action Strategies:

• Develop outcome measures for all academic programs that ensure quality and employability of students.

• Recognize outstanding performance by faculty, staff, and students.

• Increase participation by faculty and students in seminar series.

• Strengthen performance evaluation criteria for faculty by taking into consideration funded grants, service activities, academic achievements, and publications in reputable professional journals.

Success Indicators:

• Outcome measures developed for all academic programs.

• The extent to which outstanding performance is recognized by the departments, the College, and professional organizations.

• Increased sharing of intellectual issues with colleagues.

• Effective evaluation instruments in place.

C. Create programs and incentives that increase the number and rate of discoveries that are commercialized.

Action Strategies:

• Assist with and support patent applications for new innovations.

• Monitor industry, market, and societal trends to identify emerging areas. Success Indicators:

• The degree to which the public and sectors utilize College discoveries.

• Number of patents issued.

Goal III. Strengthen community engagement and communication with stakeholders.

Objectives:

A. Drawing on current research, enhance the sustainability and profitability of agriculture with a focus on small-scale agriculture.

Action Strategies:

• Assist beginning and existing farmers in developing management and business practices to ensure farm survival and future success.

• Develop techniques that add value to agriculture products.

• Develop and promote alternative enterprises.

• Increase the use of university agricultural research and education centers to effectively promote research and outreach activities, and student experiential learning opportunities.

• Increase geographical areas covered by TSU extension programs and personnel.

Success Indicators:

• The extent to which farmers use best management and business practices.

• The extent to which value-added products are explored and developed.

• The extent to which farmers are engaged in alternative enterprises.

• The extent of increased use of university agricultural research and education centers for research and outreach activities, and student experiential learning opportunities.

• Increased number of counties with TSU extension programs and personnel.

B. Promote outreach and civic engagement initiatives that connect the College’s programs with societal needs.

Action Strategies:

• Identify and address family and community needs.

• Evaluate and expand outreach programs in nutrition, family life, youth education and environmental stewardship.

• Encourage faculty and staff to participate in reward and recognition programs.

• Communicate adequately with faculty, staff and students.

• Promote academic and social interaction among faculty, staff and students.

• Encourage and support infrastructure for professional growth and development for faculty and staff.

Success Indicators:

• The extent to which new and existing programs address family and community needs.

• Increased number of people reached through existing programs.

• Establishment of new teaching, research, and outreach programs that address the needs of stakeholders.

• Continue to review and improve strategies for professional development and mentoring of new and junior faculty and staff.

• Increased number of impact statements, articles, annual reports, newsletters, brochures, and other information products.

• Provide for the succession of junior faculty into senior faculty positions.

• Improved personnel performance.

• Increase number, type and medium of communications directed toward students.

• Availability of joint activities attended by faculty, staff and students.

• Recognize and reward superior achievement and scholarship by faculty, staff and students.

C. Expand opportunities for stakeholders to provide strategic advice.

Action Strategies:

• Develop local, state, national and international partnerships to foster teaching, research, learning, and outreach.

• Through partnerships, apply the College’s knowledge and expertise to address and solve local, state, and national problems and issues.

• Build and strengthen relationships with key constituency groups, including alumni and advisory boards.

• Form advisory groups for each program area in the College if one is not already active.

• Develop inter- and multidisciplinary teams (teaching, research and extension) within the College, across the University and with other universities, agencies, and stakeholders.

Success Indicators:

• Increased number and caliber of new partnerships developed and maintained.

• Impacts garnered from new partnerships.

• Number of research/extension/teaching programs created as a result of stakeholder input.

• Type, number and extent to which problems and issues are identified and solved.

• Participation and involvement of advisory board members.

D. Improve the College’s dissemination of results and opportunities for advanced products and technologies.

Action Strategies:

• Recruit and retain a high quality faculty and staff.

• Develop high quality impact statements and annual reports that adequately reflect College outputs and outcomes.

• Disseminate information via articles, annual reports, newsletters, brochures, webpage, and other outlets.

• Increase number of articles published in reputable refereed journals.

• Development of research based educational programs by extension faculty that are used in programs across the state.

Success Indicators:

• Increased number of articles published in refereed journals.

• Increased number of impact statements, articles, reports, newsletters, brochures, and other information products.

• Increased number, type, and medium of communications directed toward students.

• Increased number of educational programs developed by extension faculty and in use across the state.

E. Increase the opportunity for students to participate in outreach efforts.

Action Strategies:

• Actively recruit and encourage students and faculty to participate in outreach/extension programs and campus-wide TSU Service Days.

• Build and strengthen relationships with local, state, regional, and national communities and stakeholders.

• Build and strengthen relationships with key constituency groups, including alumni and advisory boards.

* Develop inter- and multidisciplinary teams (teaching, research and extension)

within the College, across the University and with other universities, agencies, and stakeholders.

Success Indicators:

• Increased numbers of students and faculty participating in outreach/extension programs and campus-wide TSU Service Days.

• Increased relationships with local, state, regional, and national communities and stakeholders

• Impacts garnered from new partnerships.

• Type, number and caliber of interdisciplinary/multidisciplinary teams developed.

• Type, number and extent to which problems and issues are identified and solved.

• Participation and involvement of advisory board members.

Goal IV. Strengthen and develop international programs and partnerships to better prepare faculty and students for working within a global society.

Objectives:

A. Infuse a global perspective into the College’s teaching, research and extension programs.

Action Strategies:

• Offer continuing education programs on specific topics of interest to address international food, agriculture and consumer sciences issues.

• Provide opportunities for international program representatives to visit the

College for the purpose of exposing and developing relationships with faculty.

Success Indicators:

• Increased number of continuing education programs on specific topics of interest to address international food, agriculture and consumer sciences issues.

• Increased number of international program representatives visiting the College.

B. Promote faculty and students’ participation in international educational activities.

Action Strategies:

• Implement a study abroad plan where faculty can develop courses to be taught abroad.

• Develop short-term programs where faculty and students have the opportunity to participate in an experience abroad.

• Increase collaborations with other University units in international programs. Success Indicators:

• Increased number of courses taught abroad.

• Increased number of students and faculty participating in international activities.

C. Promote international activities through collaboration with educational institutions agencies and organizations throughout the world.

Action Strategies:

• Develop international memoranda outlining cooperation between the College and institutions of higher learning or organizations outside the U.S.

• Promote international participation in online courses and programs offered at TSU.

Success Indicators:

• Increased number of international memoranda developed.

• Increased enrollment of international students in online courses and programs.

D. Develop collaborative educational and research grant proposals with international entities.

Action Strategy:

• Identify and seek assistance from funding agencies and organizations supporting international projects.

Success Indicator:

• Increased number of proposals developed with international emphasis.

Goal V. Embrace innovative technologies and concepts to advance teaching, research, and extension.

Objectives:

A. Use advanced technologies to integrate program delivery from campus to field to clients

Action Strategies:

• Increase number of web-based courses and programs.

• Provide training for faculty, staff, and students in the use of advanced technologies.

• Partner with software and hardware manufacturers and vendors to provide cutting edge technologies.

Success Indicators:

• Increased number of web-based courses and programs.

• Faculty, staff and students fully trained in the use of advanced technologies.

• Number of new and continued partnerships with software and hardware manufacturers and vendors.

B. Enhance facilities to accommodate new and developing programs.

Action Strategies:

• Identify programs and needs.

• Develop funding plan.

• Upgrade or build needed facilities. Success Indicators:

• Active list of priority programs requiring facility enhancements.

• Funding plan developed and implemented

• Facilities completed.

C. Maintain state-of-the-art facilities.

Action Strategies:

• Purchase and efficiently utilize equipment.

• Allocate internal resources and seek external funding for staffing and maintaining state-of-the-art equipment.

• Provide support for faculty and staff to be adequately trained in use and maintenance of technologically advanced equipment.

• Provide funds for continual upgrades of equipment and facilities. Success Indicators:

• Efficient and productive use of equipment.

• Facilities updated and well-maintained.

Goal VI. Promote diversity among students and faculty in the College.

Objectives:

A. Expand recruiting efforts to reach students of diverse demographics.

Action Strategies:

• Develop an integrated recruitment plan that targets both majority black and non-black schools, urban and rural schools, and other demographic classifications.

• Utilize extension to establish connections with culturally diverse communities.

• Sponsor/maintain booth at International Fairs/Days at TSU, in the community

(Centennial Park, State/Regional Fairs), and at state FFA/4H events.

• Translate portions of the College web site and certain other College publications into target languages.

• Seek/Provide scholarships for target students. Success Indicators:

• The number of new, or percent increase in students from ethnic/racial

backgrounds and geographic areas currently under-represented.

• The extent to which web site is translated in target languages.

• The extent to which target students are supported through scholarships.

B. Maintain a diverse socio-cultural profile of the College’s faculty and staff.

Action Strategies:

• Continue the current effort of generating diverse applicant pools for professional positions, with increased inclusion in the development of hiring committees and transparency through the screening process.

Success Indicators:

• The number of new, or percent increase in faculty and staff from ethnic/racial backgrounds and geographic areas currently under-represented.

C. Continue to provide opportunities for students to become engaged in major-based activities that involve diverse cultural groups.

Action Strategies:

• Support student involvement in experiential learning activities that facilitate direct interaction with students from other institutions and industry/community stakeholders that represent diverse backgrounds.

• Continue to support and strengthen minority-serving student groups.

• Establish major-specific departmental student organizations to increase involvement in culturally diverse activities.

Success Indicators:

• The extent to which curriculum and student organizations are involved in experiential learning activities that facilitate interaction.

• The extent to which TSU students are involved with students from other institutions and industry/community stakeholders that represent diverse backgrounds.

D. Inclusion of diversity perspectives within course offerings.

Action Strategies:

• Conduct seminars to expose faculty, staff, and students to other cultures and cultural issues.

• Include historical and international viewpoints along with scientific and social points of view in classroom instruction and encourage dialogue of the same.

Success Indicators:

• Extent to which cultural-based seminars are offered and attended.

• Extent to which historical and international viewpoints along with scientific and social points of view are used in classroom instruction and dialogue.

Goal VII. Enhance the resources of the College.

Objectives:

A. Broaden and increase funding portfolio.

Action Strategies:

• Submit teaching, research, extension and integrated proposals under established USDA NIFA, NIH and NSF guidelines.

• Develop and maintain collaborative partnerships with the public and private sectors.

• Increase the number of research and extension projects that involve collaboration outside of Tennessee State University

• Increase the number of proposals submitted to agencies other than USDA.

• Seek funding through foundations and corporations.

Success Indicators:

• Number of new partnerships formed outside of TSU.

• Increased varieties of funding agencies to which proposals are submitted.

• Increased number of grant applications submitted.

• Increased amount of funding received.

B. Attract funding for scholarships and assistantships.

Action Strategies:

• Conduct aggressive alumni and corporate donations campaign.

• Identify and conduct solicitation campaign. Success Indicators:

• Increased donations by alumni.

• Number of donations by corporations.

• Increased number of scholarships available. C. Broaden number of student internship opportunities.

Action Strategies:

• Foster interaction with external organizations.

• Develop adequately funded internships with state and federal governments, Corporations, foundations and other public and private entities.

Success Indicators:

• Increased number of funded student internships available.