

DEPARTMENT OF ANIMAL AND FOOD SCIENCES

Strategic Plan (2011-2015)

MISSION STATEMENT

The Department of Animal and Food Sciences is dedicated to the pursuit of excellence in higher education, and the personal development of students, staff and faculty through a commitment to creative teaching, research and service.

VISION STATEMENT

The Department of Animal and Food Sciences will be recognized among the top such institutions in the world, based on academic excellence, accomplishments in research and creative activities, and outreach and engagement in all aspects of animal and food sciences. The reputation of the Department will be grounded in our core values and achieved through the collaborative efforts of our faculty, staff, and partners.

The Department of Animal and Food Sciences is committed to:

- being recognized among top departments in the U.S. and worldwide;
- preparing students to become global leaders in animal production, food production and related industries;
- discovering and applying knowledge through research and creative activity;
- fostering social and cultural development and economic growth.

The Department of Animal and Food Sciences is committed to the following values:

- mutual respect, trust, and a supportive environment;
- open communication, teamwork, and partnership;
- creativity, innovation, and pursuit of excellence;
- community service, leadership, and public accountability;
- diversity; and
- academic and intellectual freedom.

OUTCOMES, ASSESSMENT METHODS, OBJECTIVES AND STRATEGIES

Outcome 1: Increase Student Enrollment, Access to Higher Education, and Preparedness.

KEY OUTCOME: Grow and diversify AFS's student population to increase participation in higher education and to prepare a qualified workforce for the State of Texas (relates to Texas Higher Education Board's "Closing the Gaps in Participation" and "Closing the Gaps in Success").

Assessment Methods:

- Enrollment of 525 undergraduates. (2005: 307; 2009: 352 ; 2010 Outcome: 397)
- Enrollment of 100 graduate students. (2005: 48; 2009: 58; 2010 Outcome: 67)
- Student to faculty ratio of 25 in department (2010: 15).
- 70% of the first-time entering freshman class students at the institution are in the top 25% of their high school class (as measured by Mean Class Rank of entering freshmen)
- Mean SAT score of 1210 for first-time entering freshman class students.
- Mean ACT score of 26 for first-time entering freshman class students.
- Achieve 15% ethnic diversity of entering freshman. (2005: Undergrad – 11, Grad – 3; 2009: Undergrad – 54, Grad – 3; 2010 Outcome: Undergrad – 46, Grad - 8)
- 85% first year undergraduate retention rate. (2005: 80%; 2009: 82%; 2010 Outcome: 90%)
- 75% second year retention rate for majors or degree seekers.
- 65% 4-year undergraduate graduation rate. (2005: 65%; 2009: 60%; 2010 Outcome: 60%)
- 70% 6-year undergraduate graduation rates in the major or degree program
- 90 students enrolled in courses at distance per year. (2005: ; 2009: 110; 2010 Goal: ; 2010 Outcome: 58)
- Offer 3 undergraduate courses at distance. (2005: 5; 2009: 3; Goal for 2010: 8; Outcome for 2010: 1)
- Offer 2 graduate courses through distance learning. (2005:3; 2009: 1; Goal for 2010: 6; Outcome for 2010: 1)
- Offer 2 certificate programs for professional development and continuing education. (2005: 0; 2009: 5; 2010 Outcome: 5)
- 90 undergraduates involved in formal internships per year. (2005: 70; 2009: 70; 2010 Goal: 70)
- 10 undergraduates involved in study abroad and international experience per year.(2005: 2; 2009: 14; 2010 Goal: 10)
- 75 undergraduates involved in research per year. (2005: 15; 2009: 38; 2010 Goal: 75; Outcome 2010: 57)
- Mean GRE score of 1050 for entering Masters students.
- Mean GRE score of 1080 entering Ph.D. students.

- 90% Master's graduation rate.
- 85% Doctoral graduation rate.
- Median time to Doctoral degree completion of 3.5 years.
- 90 undergraduate degrees awarded per year. (2005: 49; 2009: 59)
- 20 Master degrees awarded per year. (2005: 16; 2009: 20)
- 10 Ph.D. degrees awarded per year. (2005: 6; 2009: 4)
- Offer 1 150-hour degree program. (2005: 0; 2009: 0; 2010 Goal: 0)
- Add a Ph.D. Program in Food Science

Objectives:

Objective 1.1: Increase student numbers and diversity

Strategies:

- Enhance recruiting efforts and collaborative programs targeting four-year colleges, community colleges, and science and advanced placement classes at selected high schools.
- Strengthen recruiting efforts to attract high-quality graduate students from other colleges and prestigious research universities across the globe.
- Increase recruiting efforts in areas with high minority student populations.
- Increase overall scholarship funds, and focus on scholarships targeted at minority students.

Objective 1.2: Increase recruitment of high achievement students into freshman class

Strategies:

- Use scholarships that target high-achievement students.
- Promote AFS majors as excellent preparation for professional schools.
- Emphasize STEM and pre-professional options for undergraduates.

Objective 1.3: Increase recruitment of high achievement transfer students

Strategies:

- Emphasize STEM and pre-professional options for undergraduates.
- Recruitment emphasizing placement of outstanding students on competitive teams.

Objective 1.4: Increase distance learning opportunities

Strategies:

- Provide technical and financial assistance for distance learning.
- Increase number of distance-based courses.
- Partner with other universities (e.g., Ag IDEA) in providing distance-based degrees.

Objective 1.5: Provide undergraduate, graduate, and professional curricula and programs that enhance disciplinary knowledge and analytical, creative thinking, and leadership skills

Strategies:

- Conduct comprehensive curriculum reviews to assess the capacity of current programs and needs for change.
- Incorporate input from Departmental Advisory Committee members and industry representatives in evaluation of curricula in AFS.

Objective 1.6: Increase participation in study abroad, exchange programs, and involvement in research

Strategies:

- Faculty will actively recruit and encourage student participation in study abroad and exchange programs.
- Use ANSC 1401 to promote programs to freshman.
- Provide special problem and internship opportunities for undergraduate students involved in research.

Objective 1.7: Increase the number of high-quality graduate students

Strategies:

- Increase scholarships and fellowships for graduate students.
- Provide scholarships that will cover the cost of all tuition and fees for graduate students.
- Provide funding for recruitment of high-quality graduate students.
- Increased utilization of Graduate School funds for scholarship, fellowships and travel.

Outcome 2: Enhance Academic Quality and Reputation

KEY OUTCOME: Attain national recognition in undergraduate, graduate, and professional education and increase national and international stature and recognition of faculty, staff, and students.

Assessment Methods:

- 3 new traditional and targeted faculty hires by 2015.
- 10 staff involved in professional development activities per year.
- 2 staff awards per year.
- 1 tenured/tenure-track faculty who have achieved professional recognition as a fellow of a national society by 2015.
- 2 tenured/tenure-track faculty holding officer/board positions in professional societies by 2015.
- 2 tenured/tenure-track faculty serving on special Federal/State/Regional committees/boards/review panels by 2015.

- 40 state, regional, and national championships for collegiate teams and clubs by 2015. (2015 goal is to have 8 new state, regional or national championships)
- 5 endowed chairs and professorships by 2015. (2005: 2; 2009: 3 2010 Outcome: 3)
- 1 tenured/tenure-track faculty who have achieved national or international distinction through recognition as a member of one of the National Academies by 2015.
- 1 formal student exchange programs with international institutions by 2015.

Objectives:

Objective 2.1: Recruit, mentor, retain, recognize, and reward outstanding, diverse faculty and staff

Strategies:

- Leverage strategic/targeted hiring opportunities provided by the Office of the Vice President for Research.
- Hire new faculty in areas that have been identified as strategic opportunities in research and teaching.
- Ensure departments have strong, consistent efforts to mentor young faculty by utilizing the Departmental Mentor Program.
- Facilitate and encourage faculty participation in professional development opportunities including international activities.
- Facilitate and encourage staff participation in Service Plus, TLTC, and other professional development opportunities.

Objective 2.2: Increase national recognition of faculty and students

Strategies:

- Utilize the Departmental Awards committee to nominate more faculty and staff for university and professional awards and honors.
- Charge the AFS Scholarship Committee with annually evaluating students for nomination to university, regional, and national awards.
- Encourage faculty to nominate graduate students for scholarships, fellowships, awards and honors

Objectives 2.3: Increase the number of faculty involved in international activities; including teaching, research and formal exchange programs.

Strategies

- Document international activity, including involvement, collaboration and exchange programs.
- Encourage faculty to seek grant funding for international programs and activities.

Outcome 3: Expand and Enhance Research and Creative Scholarship

KEY OUTCOME: Increase national recognition in research and creative scholarship (relates to Texas Higher Education Board's "Closing the Gaps in Research")

Assessment Methods:

- 5 Postdoctoral appointments per year.
- 75 undergraduates involved in research per year. (2005: 28; 2009: 38; 2010 Goal: 50)
- 50 multi-department, college, and institutional research proposals submitted per year
- 28 multi-department, college, and institutional research proposals funded per year
- 1:5.5 leveraging of state funds. (2005:1:4.7; 2009: 5.5.7; 2010 Outcome: 1:4.59)
- 2 significant new patents, license agreements, or commercial entities per year. (2005: 0; 2009: 0; 2010 Outcome: 0)
- 1 significant sponsored research agreements tied to licensing agreements per year. (2009: 0; 2010 Outcome: 0)
- 20% increase in total revenue from technology commercialization by 2015.
- 55 research proposals submitted per year.
- \$13M worth of research proposals submitted per year. (2005:\$15.8M ; 2009: \$21.1M, 2010 outcome: \$8.7M)
- \$6M total research funding per year. (2005: \$2.4M; 2009:\$2.8 M; 2010 Outcome: \$2.3 M)
- 80% faculty generating sponsored research funding per year.
- \$0.5M institutional dollars (departmental) spent on research equipment and facilities and renovation by 2015.
- Publications - 3 refereed journal publications per year per faculty member and average impact factor of journals 2015: 2.0. Average of 70 peer-reviewed publications per year in AFS.
- Presentations – Number of invited faculty presentations per faculty (2015: 3) and number of graduate student presentations per faculty (2015: 5)

Objectives:

Objective 3.1: Enhance existing research programs and develop new research initiatives

Strategies:

- Conduct research retreats to enhance collaboration and new ideas.
- Provide adequate departmental staff in accounting to handle new accounts and initiatives
- Provide start-up funds for new investigators.
- Establish a prioritized list of areas of research excellence within AFS.
- Coordinate support and target additional resources to maintain and enhance areas of research excellence

Objective 3.2: Promote and support collaborative research (multidisciplinary, interdisciplinary, trans-disciplinary and inter-institutional research)

Strategies:

- Seek and secure seed funding to promote collaborative and multidisciplinary research priorities.
- Compile and distribute electronic copy of an annual report of faculty abstracts and currently funded research.

- Reward PIs and Co-PIs involved in collaborative research.
- Continue support of the International Center for Food Industry Excellence, the Pork Industry Institute and multi-university consortiums such as the Consortium for Cattle Feeding and Environmental Sciences.
- Secure seed funding to promote multidisciplinary research priorities.

Objective 3.3: Foster research programs that contribute to local and regional economic development and entrepreneurship

Strategies:

- Use the Departmental advisory committees and interactions with other industry groups to establish priorities for economic development and entrepreneurial opportunities.
- Encourage faculty to promote commercialization of technologies that support economic development and entrepreneurship.
- Promote technology transfer and license agreements.

Objective 3.4: Increase research funding

Strategies:

- Encourage every faculty member to pursue external funding.
- Provide timely information on funding opportunities to faculty.
- Encourage faculty participation in TTU-sponsored grant-writing workshops.
- Provide incentives (salary, release time, graduate student support, post doctoral support, etc.) to faculty who obtain significant competitive grant funding.
- Encourage research partnerships between faculty in multiple departments and other institutions to allow for submission into broader research programs.
- Provide travel funds for faculty to visit program directors or specific grant writing workshops.
- Provide partial travel funds for visitation with potential collaborators.
- Facilitate efforts to secure more research funding from international funding agencies, corporations and foundations.

Objective 3.5: Construct, renovate, and modernize research facilities

Strategies:

- Add a new research/teaching wing to AFS.
- Expansion of Livestock Arena to include additional classroom and conference area.
- Identify and address space needs for research facilities.
- Increase access and use of state-of-the-art technology in research.
- Solicit funds through grants, foundations, and industry for equipment and instrumentation.
- Seek and add endowments for facility maintenance for units (New Deal Farm, Equestrian Center, etc.).

Outcome 4: Strengthen Outreach, Engagement, and Pride in AFS

KEY OUTCOME: Increase outreach and engagement activities and public knowledge and support of the Department of Animal and Food Sciences

Assessment Methods:

- 40 workshops, symposia, and other events per year sponsored or supported for governmental agencies, non-governmental organizations, producers, industry groups, trade associations, and consumers. (2010 Outcome: 30)
- Host 75 outreach, service and recruitment programs for local, regional, state and national organizations for educational programs and competitions to impact 15,000 participants annually. (2010 Outcome: 70 events, 14,000 impacted)
- Establish 1 joint appointment between AFS and the Texas AgriLife Research.
- Establish 1 joint appointment between AFS and the Texas AgriLife Extension.
- Offer 5 courses with service learning component per year. (2010 Outcome: 2)
- 70 newscasts per year on local, regional, or national print news, radio, television and digital media. (2010 Outcome: 65)
- Increase circulation to 3,000 for the bi-annual publication of HOME OF CHAMPIONS. (2010 Outcome: 2,701)
- Increase awareness and circulation of the meat science newsletter, *Choice News*.
- Produce 2 E-Newsletters from the department.(2010 Outcome: 1 E-Newsletter)
- Host 5 regional alumni functions per year. (2010 Outcome: 4)
- Increase presence in social networks such as Facebook, Twitter, blogs, etc.
- Continuation of the Hall of Fame and Meat Science Recognition Banquet, Spring Student Honors Banquet and Judging Program Tailgate. Also assist CASNR with the following events: Pig Roast, Agricultural Awareness Week, Homecoming Breakfast, 50th Class Reunion Luncheon, Distinguished Alumni Luncheon, and CASNR Award Ceremony

Objectives:

Objective 4.1: Strengthen partnerships and collaborations with all groups involved in education and research in agriculture and natural resources.

Strategies:

- Increase cooperative efforts with TAMU AgriLife Research and Extension and USDA-ARS.

Objective 4.2: Strengthen and initiate partnerships and cooperation within the Texas Tech University System and with other institutions.

Strategies:

- Enhance partnerships and cooperation with other units of the Texas Tech University System.
- Expand partnerships to other universities in the region (e.g., Angelo State University, West Texas A&M University, and Eastern New Mexico University).
- Collaborate with other universities to strengthen the national FFA and 4-H programs.

Objective 4.3: Increase faculty, staff, and student involvement in service learning and outreach activities.

Strategies:

- Increase service-learning opportunities in AFS courses by developing additional courses with service learning component.

Objective 4.4: Enhance public awareness of AFS

Strategies:

- Increase articles in local and regional newspapers about high-visibility AFS research and teaching.

Objective 4.5: Inform alumni of college accomplishments and encourage them to be ambassadors for the AFS

Strategies:

- Develop social media-based applications for alumni that will share AFS news and information.

Outcome 5: Attain Resource Sufficiency and Efficiency and Ensure Accountability

KEY OUTCOME: Increase funding and optimize resource allocation for scholarships, professorships, endowments, and facilities while enhancing our stewardship of those resources.

Assessment Methods:

- Balanced unrestricted direct revenues and expenditures.
- 33,000 total weighted student credit hours per year.
- Space utilization (we need to find space use-efficiency measure for this)
- \$150K AFS scholarship support per year.
- \$750K total scholarship support for AFS students per year. (2005: \$84K; 2009: 115K; 2010 Goal: \$150K; 2010 Outcome: \$500K)
- 40% undergraduate and graduate students on scholarship per year. (2005: 30%; 2009:40%; 2010 Goal: 50%; 2010 Outcome: 22.9%)
- \$18M total endowments by 2015. (2005: \$5.2M; 2009: \$10M; 2010 goal: \$12M; 2010 Outcome: \$11.3M)
- \$250K value of cash donations per year.
- \$250K from non-traditional revenue streams (royalties, agreements, license fees) (2005: \$9,199; 2010 goal: \$100K; 2010 Outcome: \$201,913)

Objectives:

Objective 5.1: Develop and integrate a new budget model (that tracks unrestricted revenues and expenditures) into AFS decision-making process to maximize fiscal performance.

Strategies:

- Apply approaches for development of teaching and research priorities for AFS.
- Auxiliary and animal unit, and program managers must routinely monitor accounts and be accountable for balanced budgets

Objective 5.2: Raise more money for scholarship endowments

Strategies:

- Increase coordinated efforts among CASNR Dean's Office, Development Office, and AFS Department to obtain endowed scholarships, particularly from alumni and friends of the college.

Objective 5.3: Raise more money for faculty chairs and professorships

Strategies:

- Increase coordinated efforts among AFS, CASNR Dean's Office, and Development Office, to obtain endowed chairs and professorships, particularly from non-traditional sources.

Objective 5.4: Raise more money for program endowments

Strategies:

- Increase faculty involvement in fund raising.
- Increase student involvement in fund raising.
- Increase involvement and utilization of alumni and friends in fund raising.
- Effectively communicate departmental needs to alumni and friends
- Enhanced stewardship to donors and supporters.
- Instill in current students the need to give back.
- Target development to different generational groups.

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