

Sustainable Technology & the Built Environment



APPALACHIAN STATE UNIVERSITY

DEPARTMENTAL STRATEGIC PLAN

Adopted September 2016

VISION STATEMENT: Building solutions. Developing leaders.

MISSION STATEMENT: Our mission is to foster a strong and vibrant culture of inquiry, discovery, and innovation that integrates theory with application, problem seeking with problem solving, local issues with global perspectives, and technological progress with environmental stewardship.

GOAL #1 (TEACHING):

Provide exemplary teaching that inspires and challenges students through experiential learning, synergistic curricula, and community engagement.

GOAL #2 (SCHOLARSHIP):

Conduct and disseminate scholarly work that focuses on sustainable solutions to important challenges in the design, creation, and management of technological systems.

GOAL #3 (SERVICE):

Serve as a resource and a catalyst for local and global communities through projects, partnerships, and outreach.

2020 STRATEGIC PLANNING STATEMENT: By the year 2020, the Department will achieve its mission through the implementation and continual assessment of the following five strategic directions.

STRATEGIC DIRECTION #1: STUDENT DEVELOPMENT

We will promote the development of student leaders through meaningful experiential learning and enrichment opportunities via the following initiatives and metrics:

1. Development of international experiences
 - a. Offer three study abroad opportunities each summer with a minimum enrollment of 12 (Target: annually)
 - b. Provide project-based global learning opportunities (Target: one per year)
 - c. Recruit students to participate in semester-long international study abroad (Target: two per year)
2. Development of financial support for students
 - a. Increase student applications submitted for department scholarships (Target: 10% annually)
 - b. Increase the number of, and the level of funding for, departmental scholarships available to STBE students (Target: 10% annually)
 - c. Maintain a structure for publicizing, reviewing, and awarding student scholarships (Target: ongoing)
 - d. Establish a travel fund for student participation at conferences, field trips, and competitions (Target: 2017 and ongoing)
 - e. Host a scholarship award ceremony for donors and recipients (Target: annually)
3. Development of student extracurricular opportunities
 - a. Provide opportunities for STBE majors to be involved in at least one department student organization or special project during their academic career (Target: 100% participation)
 - b. Provide opportunities for STBE majors to be involved in service-learning and/or community service projects during their academic career (Target: 40% participation)
4. Development of student career readiness
 - a. Host career development activities within the department, such as industry lectures, career fairs, or other career-development workshops (Target: two activities per semester)
 - b. Increase student involvement in University-wide career events, such as the Career Fest and the Internship Fair (Target: 50% participation by STBE juniors and seniors)
 - c. Create an alumni tracking system (Target: Contact with 15% of STBE alumni by 2017)
 - d. Establish an exit interview and/or survey of graduating seniors (Target: 2017 and annually)
5. Development of student recognition programs
 - a. Establish selection criteria and incentives for student involvement in an STBE Student Ambassador program with six undergraduate students annually (three each from ST and BS) to assist with Open House, meetings with prospective students, and other recruiting events (Target: 2016 and ongoing)
 - b. Host an annual departmental Senior Showcase event that includes both program areas (Target: 2017 and annually)

STRATEGIC DIRECTION #2: FACULTY DEVELOPMENT

We will promote the development of faculty expertise as teachers, researchers, and community leaders through opportunities for professional growth and well-being via the following initiatives and metrics:

1. Development of instructional and technical skills
 - a. Conduct a survey of technical skill development needs among faculty (Target: 2016)
 - b. Gather information about faculty software needs (Target: 2016)
 - c. Host in-house technical skill development workshops (Target: one annually)
 - d. Assign a faculty mentor to all new faculty, both full- and part-time (Target: ongoing)
 - e. Identify and disseminate opportunities for University-sponsored faculty development workshops (Target: ongoing)
 - f. Review, periodically revise, and facilitate the faculty peer review process. (Target: annually and ongoing)
2. Development of research and scholarly endeavors
 - a. Facilitate identification of departmental research directions and opportunities for collaboration by holding “research roundtables” (Target: one per semester)
 - b. Identify and disseminate opportunities for research and scholarly activity funding (Target: ongoing)
 - c. Host a faculty research lecture series (Target: three lectures per semester)
 - d. Host “conference sharing” sessions at which faculty will disseminate information about key information gained at professional conferences (Target: one per semester)
 - e. Create a system of mentoring to promote scholarly writing/publications (Target: 2017 and ongoing)
3. Development of tools for documenting faculty professional development
 - a. Create reporting mechanisms within Digital Measures that enable faculty to document professional development activities such as attendance at workshops and professional conferences (Target: 2017)
 - b. Establish a formal mechanism for recognizing faculty excellence through: (1) nominating colleagues for college, university, state, and national/international awards; (2) identifying and publicizing notable faculty successes; and (3) creating internal strategies for recognizing colleagues for exemplary performance in teaching, research, or service (Target: ongoing)
 - c. Review and revise, as necessary, the departmental promotion and tenure document to insure that engagement in professional development activities is promoted within the guidelines (Target: 2017)

STRATEGIC DIRECTION #3: COMMUNITY DEVELOPMENT

We will provide professional service, educational outreach, and project-based engagement at university, local/regional, and global levels via the following initiatives and metrics:

1. Development of the University community
 - a. Add “Research Trail” activities to our Spring Open House program where tours will be available at our off-campus research sites (Target: one annually)
 - b. Meet with University Communication to promote, brand, and disseminate departmental efforts (Target: one annually)
 - c. Engage students and faculty in collaborative projects that benefit the University community, such as development of cross-departmental display areas, resource labs, courses, or other activities (Target: one annually)
2. Development of local, regional, and national communities
 - a. Disseminate applied research findings through workshops that are open to the public (Target: one per semester)
 - b. Host open house events at active research sites (Target: one per semester)
 - c. Invite representatives from local/regional businesses to serve as guest lecturers, critics, or collaborators on projects (Target: ten annually)
 - d. Maintain a database that tracks the placement and outcomes of interns at local/regional businesses (Target: ongoing)
 - e. Develop articulation agreements with NC community colleges (Target: one annually)
 - f. Develop and maintain a departmental database that documents faculty leadership roles in national professional organizations (Target: 2018 and ongoing)
3. Development of the global community
 - a. Sponsor a faculty exchange, visiting faculty member, or international OCSA (Target: biannually)
 - b. Develop and maintain a list of international universities and institutions with whom we have developed relationships, including details about those relationships (Target: Spring 2017 and ongoing)
 - c. Engage in international service-learning endeavors (Target: one biannually)

STRATEGIC DIRECTION #4: PROGRAM DEVELOPMENT

We will develop and deliver high quality instruction and relevant curricula to prepare students to be leaders in their disciplinary communities via the following initiatives and metrics:

1. Development of high quality instruction
 - a. Assess current and potentially develop new teaching evaluation tools, including student evaluations, peer review, student self-assessments, etc. (Target: biannually)
 - b. Host workshops on effective teaching methodologies, effective advising, and other programmatic support activities (Target: twice annually)
2. Development of relevant and high quality curricula
 - a. Conduct program-level and department-level evaluations of curricula, and identify strategic changes to improve and update programs of study (Target: annually)
 - b. Consult with the departmental Industry Advisory Board, once established, about curricula (Target: annually)
3. Development of program assessment and improvement plans
 - a. Conduct program assessments, including attainment of student learning outcomes and other program-level functions, via Xitracs and other means (Target: annually for each program)
 - b. Develop program improvement plans that are based on assessment data and that engage all program area faculty (Target: annually for each program)
4. Development of instructional and programmatic support personnel
 - a. Make strategic use of students receiving Instructional Assistant course credit (Target: each semester)
 - b. Develop/refine work descriptions for lab assistants and graduate assistants to ensure adequate support for on- and off-campus research labs (Target: annually)
 - c. Hire a full-time lab technician (Target: 2018)
 - d. Conduct an annual departmental discussion of strategic hiring (Target: annually)
5. Development of resources
 - a. Create and maintain a prioritized list of space, equipment, and software needs and requirements (Target: annually)
 - b. Develop and manage lab maintenance protocols to focus on functionality and safety of labs and studios (Target: 2017 and annually)
 - c. Develop and manage a major equipment maintenance schedule and provide report to departmental faculty (Target: 2018 and annually)
 - d. Create a database of specialized equipment (e.g., data loggers, blower door test equipment, gas analyzers, etc.) and a system for checking out this equipment (Target: 2017)

STRATEGIC DIRECTION #5: PARTNERSHIP DEVELOPMENT

We will develop and maintain strategic partnerships with industry, educational entities, and governmental agencies via the following initiatives and metrics:

1. Development of external advisory relationships
 - a. Establish an Industry Advisory Board, with bylaws and goals, that contains members representing building science, sustainable technology, and government/research labs or related not-for profit organizations (Target: 2017)
 - b. Host annual meetings and social events with members of the Industry Advisory Board (Target: two events annually)
2. Development of equipment, materials, and monetary donations
 - a. Secure a minimum of \$10,000 worth of materials and tools for lab-based classes (Target: annually)
 - b. Obtain major equipment or software (greater than \$1500) donations (Target: one annually)
 - c. Cultivate sponsors for recurring laboratory support (Target: one annually)
 - d. Work with University Advancement to develop strategies for securing cash donations to support current use funds and other activities not covered via the department's state allocation (Target: \$10,000 annually)
3. Development of student opportunities
 - a. Identify potential new student scholarship donors/partners (Target: five annually)
 - b. Create and keep an up-to-date internship database, and develop new internship possibilities (Target: 2017, and five annually)
 - c. Seek opportunities for students to work collaboratively with industry professionals via sponsored studios or other partnership agreements (Target: one annually)
 - d. Host a departmental career fair (Target: annually)
4. Development of research & development partnerships
 - a. Secure R&D projects with both industry and governmental partners (Target: two annually)
 - b. Secure relationships to independently test products or systems (Target: one annually)
 - c. Establish a protocol for faculty partnerships with industry partners (Target: 2018)
 - d. Have faculty members act as visiting scholars with industry partners (Target: one annually)
5. Development of facility improvement opportunities
 - a. Present a facility fundraising strategy and progress report to faculty (Target: annually)
 - b. Work with University Advancement to develop materials to detail need and concepts for a new building, to identify potential donors, and to cultivate relationships that will lead to major funding for construction of a new facility (Target: 2018)
6. Development of communication, recruiting, and marketing strategies
 - a. Create material for the FAA newsletter that is relevant to industry partners (Target: ongoing)
 - b. Maintain an up-to-date alumni database and communicate with alumni about departmental activities (Target: annually)
 - c. Work with the College's communications officer to push information about the department, its faculty and students, and special projects, out to various external audiences (Target: ten articles/features annually)
 - d. Identify, implement, and evaluate new recruiting strategies to increase both the number and quality of program applicants (Target: 5% increase in program enrollments annually)