

Initiatives from College of Natural Sciences and Mathematics Strategic Planning Meeting (10/11/10)

Academic, Scholarly, Creative Excellence

To engage in cutting-edge research and scholarship in STEM disciplines, including basic, translational, applied, and teaching and learning. With that aim in mind, to advocate for improved support from administration for twelve-month creative activity of faculty and students.

To capitalize upon opportunities for interdisciplinary collaboration both inside and outside of the College, such as the CNSM/COB student-business-plan competition

To foster life-long learning, the College will provide and encourage professional growth opportunities for faculty and staff.

To disseminate the findings of our research and scholarship endeavors in ways that benefit our disciplines and society in general.

To improve salaries, benefits, and work environments for our faculty.

Student-Focused Environment

To enable all students to develop lifelong competencies in critical thinking, analytical and quantitative reasoning, leading to problem solving and the effective application of knowledge to real-world problems.

To enable all students to develop life-long competencies in effective communication.

To provide the highest quality undergraduate programs that prepare students to enter the work force as practitioners or teachers in STEM-related fields or to pursue advanced studies through graduate or professional programs.

To provide the highest quality master's degree programs.

To support students and programs outside of STEM that require strong foundations in mathematics, technology and the natural sciences.

To enable students, through general education courses, to learn about the complexity and diversity of the contemporary world within the context of mathematical and scientific ways of knowing.

To recruit and retain students who will become the very best practitioners of STEM and STEM-related disciplines, including professionals.

To implement the first-year programs for the STEM Residential College and develop second-year programs, including a new minor. Ultimately, to develop the STEM Residential college into a four-year program.

To engage students at all levels in mentored research activities leading to proposal submissions, presentations and publications.

To provide financial support for student research and travel to professional conferences.

To expand internship opportunities for our students College-wide

To hold students to professional standards consistent with STEM disciplines

To develop programs that help students succeed, such as mandatory undergraduate survival programs.

To reconceptualize advising of majors as creating mentoring relationships

Improvement/Innovation in Facilities/Technology

To work toward having College course fees directed to the College and Departments

To establish a standing, harvest-resistant, roll-over account to pay for major equipment and instrument repair.

With regard to expanding Lewis Science Center, to define space needs in terms of renovation, new construction and how needs meet our mission.

To fully design, build and occupy our planned “Integrated Science and Mathematics Education Center (iSMEC)” for pre-service teacher training, in-service teacher support, K-12 student programming and community outreach.

To continue to work toward acquiring and expanding access to critical library resources

To establish Conservation Easement Status for the Jewel Moore Nature Reserve.

Engagement with External Partners

To promote STEM careers among minority/under-represented Arkansans

To provide strong support to STEM teachers in K-12 schools such that teaching will be improved and student learning will be enhanced.

To seek external funding for summer programs in math and science for K-12 students

To seek external funding for pre-service and in-service training programs for math, technology, and science teachers.

To accelerate our fund-raising efforts for a new Mathematics/Science Education Center and a new planetarium.

To implement the three advisory boards for the College that were established in 2009-10:

- K-12 Partnerships
- College Development
- Corporate, Government, and Non-profit Partnerships

To procure external funding to support the teaching, research and service mission of the College, its programs and students.

To plan and implement enhance STEM awareness and recruitment activities in area high schools (outreach and counselor workshops).

To serve the public by partnering with schools, businesses, industries, foundations, and government agencies in enhancing awareness, knowledge, understanding, and application of STEM disciplines.

To provide service to the discipline through activities tied to professional societies, professional journals, foundations, accrediting bodies, government agencies, non-profits, and other institutions.

To secure a designated College development officer.

Diversity

To improve gender, socioeconomic, and ethnic diversity in our student and faculty populations.

Integrity

To fully publicize college activities and achievements.

To maintain and promote research integrity training (personal, fiscal, professional).

To maintain shared responsibility for assessment and professional and regional accreditation:

Chair Council will design a framework for program review and assessment that will be used by each unit in the College.

Each Department will review and update current assessment plans.

Each Department and Program will accomplish a comprehensive inventory of courses and degrees. A continuous improvement assessment model will be implemented.

To establish a College framework for the delivery of on-line courses and degree programs. To develop criteria for evaluating transfer requests of on-line courses at other institutions. Faculty committee will be established.

To ensure that ALL concurrent courses in the College conform to the NACEP guidelines.

To establish frameworks for making our activities more “green.”