Department of Economics
Missouri University of Science and Technology

Strategic Plan
2014 - 2020
Executive Summary

The Department of Economics welcomes this opportunity to present its strategic plan constructed in line with the new S&T Plan. In its broadest context, our plan stems from the department faculty’s perspective of the centrality economics holds in the full academic and service context of Missouri S&T.

It is our opinion that the pursuit of efficiency, which is at the core of economic thought, plays a very essential role in the teaching and research mission of any university and particularly at a STEM-focused university like S&T. The themes, levers, and action items that we present in our strategic plan need to be understood in the context of economic efficiency as it relates to our university operations.

Broadly, our strategic plan focuses on four main areas: Education, research, collaboration, and international involvement. With respect to education, we have many educational programs in our department including our stand alone B.S. or B.A. in economics, our dual major program in economics, our economics minors and our B.A. degree in cooperation with the S&T education program. We are also engaged in the development of an M.S. degree in Mining/Materials Economics. This degree is being developed in cooperation with the Mining Engineering Department.

With respect to research, we are engaged in research in a number of areas important to the university including: energy economics, natural resource economics, and sustainability among others. Several of our faculty have also been partners with proposals for cluster hires in energy, geological engineering and mining engineering.

With respect to collaboration, the Department of Economics is very involved in projects with many other departments and faculty on campus. We work with the Mathematics Department collaboratively in providing a quality Actuarial Science Program. We are involved with Mining and Nuclear Engineering on several projects including developing a graduate certificate in sustainability and, as mentioned earlier, a proposal for an M.S. in Mining/Materials Economics. The Economics Department has a similar B.S. curriculum to that of the Department of Business and Information Technology and we look forward to collaboration possibilities with their faculty. We are
also involved with the Energy Research and Development Center on research and joint-teaching projects.

With respect to international education, in collaboration with the International Affairs Office, we are involved in academic matters with universities in a number of countries including Oman, South Africa, South Korea, and China. We have had several faculty from China and South Africa doing teaching and research in our department. Three of our faculty have lead study abroad trips to South Korea, China and South Africa and we intend to use our expertise in international education to support study abroad as one means of achieving a significant experiential learning experience. We are involved with important academic agreements with Mazoon College in Muscat, Oman and we have made a number of visits to Mazoon providing supervision and support. We hope to offer study abroad projects at Mazoon. We want our economics department to be an important place for students interested in study abroad opportunities, as a path for increased education in experiential learning activities.

The process for constructing the Strategic Plan presented here has enabled our department to focus, in a systematic way, on our goals, our expertise, and our mission to the university. It is our intention to look forward to utilizing our skills and knowledge to reinforce and support S&T’s strategic plan and to maximize the value to our university.

**Department Mission**

The Department of Economics is fortunate to be a part of the teaching, research, and service mission of a quality STEM-focused university like Missouri University of Science and Technology. The Economics Department integrates economic thinking and values into an academic package that provides solid economic education and research, that enhances the university’s prime mission of technological education and research, and provides a platform for international education and diversity.

Our educational mission is four-fold: first to provide basic economic information to the campus, while providing a technologically-based economics major; second to engage in solid economic research that increases the knowledge base and visibility of the
campus, third to work collaboratively with other academic units enhancing our joint academic efforts; and fourth to utilize the diversity of our faculty to provide a platform for international appreciation and education. We also hope to develop study abroad as a means for a significant experiential learning experience.

**Departmental Strategy Statement**

The objective of our department strategic plan is to provide a road map to our goal of being a quality technologically-based economics department. Many of our faculty have STEM-based backgrounds to go with their economics degree and this provides our department with a comparative advantage in providing a technological economics program.

**Department Vision**

The Missouri S&T Economics Department will offer our students the opportunity for an enhanced technological and mathematical skill base in combination with their economic education. Economics faculty will engage in quality research and enhance the research efforts of faculty in other departments, including engineering and science. The department will be a leader in international education and study abroad. Our graduates will be highly marketable and well-prepared for graduate education in economics or business.
**Department Values**

**Lifelong Success** – The economics education provided by our department will provide a way of thinking about problems and social issues that will remain with our students for their entire life. The ability to use economic decision-making as a guide for learning will provide value in all aspects of a student’s career and personal life.

**Sustainability** – The economics department teaches sustainability as a part of the curriculum. An important part of economic theory is the ability to construct the principles behind a self-maintaining system.

**Partnership** – The economics department is a terrific campus partner. We are interested in collaboration and developing inter-departmental projects that enhance the value of the university’s education and research missions. We pursue dual-majors and minors from departments across the campus.

**Integrity** – Our department holds itself to high ethical standards with respect to its teaching, research, service and interaction with other faculty and students.

**Diversity and Inclusion** – We believe in diversity and inclusion. We have a diverse faculty. Four of our seven faculty are international and four of our department faculty are female. We are very interested in international education and we have international partnerships with South Africa, the Middle East, China, and South Korea. Three of our faculty have led study abroad trips. We hope to be an innovative department in the search for significant experiential learning opportunities.

**International Sensitivity and Outreach** – We are strong advocates for international outreach, both within our own departmental faculty and in outreach to students, faculty and staff. We are interested in promoting and supporting study abroad opportunities for students and we work hard to recruit international students into our economics program.
Department Governance and Leadership

The Department of Economics is led by the Department Chair. Decisions on important departmental matters are decided collaboratively by all the faculty. The department’s strategic plan will be administered and monitored by an internal strategic planning committee, co-chaired by Dr. Eun Soo Park and Dr. Michael Davis. At the end of each semester, the committee will engage in a departmental review of the progress the department is making with respect to its strategic goals.
Theme 1: We will develop and inspire creative thinkers and leaders for life-long success through development of a teaching portfolio focused on teaching excellence and innovation (S&T Theme 1)

Lever 1.1. Increase the Economics Department academic outreach to students. (S&T Lever 1.5)

Action 1.1.1. The number of economics majors is presently 64. We will increase the number of majors to 70 by 2015 and 100 by 2020.

Action 1.1.2. The number of economics minors is presently approximately 35. We will increase the number of minors to 45 by 2015 and 60 by 2020.

Action 1.1.3. Presently all engineering students are required to take three (3) hours of either micro economics principles or macro economics principles. We will continue our practice of contacting those students who performed well in their course and ask them to consider additional study for an economics major or minor.

Action 1.1.4. Work closely with Registrar’s Office to insure accommodation for all students in our exceptionally high enrollment classes.

Lever 1.2. Work with the Career Opportunities Center to identify possible internship opportunities for our economics majors and minors. (S&T Lever 1.1)

Lever 1.3. Increase the number of courses we offer on-line or as distance. (S&T Lever 4.1)

Action 1.3.1. Develop the joint Economics/ERDC Energy Economics class into a distance or on-line course.

Action 1.3.2. Develop a micro principles and macro principles course as on-line or distance.

Lever 1.4. Modify our conventional way of teaching to accommodate current and new technology to enhance productivity and teaching quality. (S&T Lever 2.5)

Action 1.4.1. Increase use of Blackboard in economics classes.

Action 1.4.2. Use engineering and science examples to illustrate economics concepts.

Lever 1.5. The department will focus on increasing the quality of its courses and classroom teaching. (S&T Lever 1.5)
Action 1.5.1. The department will offer new innovative courses that tie into the research and teaching strengths of the university.

Action 1.5.2. The department will work to achieve a three-year average of at least 3.0 on the student evaluation scores.

Action 1.5.3. Department faculty will regularly visit each others classes to evaluate content and teaching quality.

Action 1.5.4. We will work closely with LEAD program to provide quality student tutoring services.

Action 1.5.5. Encourage our students to pursue OURE activities.
**Theme 2:** We will enhance the reputation of the department and university and increase research productivity (Theme 2)

**Lever 2.1.** Continue to develop a culture of research excellence among the department faculty. (S&T Lever 2.3)

- **Action 2.1.1.** Increase the number of refereed economics publications/faculty by 30% by 2020.
- **Action 2.1.2.** Increase research quality as measured by number of citations by 2025.
- **Action 2.1.3.** Increase external funding amounts per faculty.
- **Action 2.1.4.** Where possible, focus economics research in areas important to the S&T mission, including energy, environmental issues and sustainability.
- **Action 2.1.5.** Undertake to publicize on campus and to the general public the research output of the faculty.
- **Action 2.1.6.** Work with faculty from other departments and centers on developing grant proposals and research publications.
- **Action 2.1.7.** Increase the number of conferences attended by department faculty.
- **Action 2.1.8.** Department faculty will support proposals for cluster hires to advance university expertise.
**Theme 3:** We will develop cooperative outreach to departments and divisions within and outside the university (S&T Theme 1)

**Lever 3.1.** *We will work with other S&T departments to develop new academic programs. (S&T Lever 1.5)*

- **Action 3.1.1.** Work with Mathematics Department to develop a dual Mathematics/Economics B.S. Degree.

- **Action 3.1.2.** Work with Mathematics Department to make S&T a top institution for the study of Actuarial Science.

- **Action 3.1.3.** Work with Mathematics Department to increase the number of actuarial science students.

- **Action 3.1.4.** Work with Mathematics Department to increase the number of graduates who have passed at least two (2) actuarial science exams before graduation.

- **Action 3.1.5.** Develop with Mathematics Department a new co-listed course designed to prepare students for the Society of Actuaries exam MFE – Models for Financial Economics.

- **Action 3.1.6.** Work with Mathematics Department to encourage students to pursue the graduate certificate in Actuarial Science.

- **Action 3.1.7.** We will develop our graduate certificate in sustainability in cooperation with the Department of Mining and Nuclear Engineering.

- **Action 3.1.8.** Continue developing joint B.A. and B.S. degrees in economics in cooperation with Mining Engineering.

- **Action 3.1.9.** Work with the Department of Mining and Nuclear Engineering to develop an M.S. degree in Mining/Materials Economics by 2015.

- **Action 3.1.10.** Work with the Energy Research and Development Center (ERCD) faculty to develop research opportunities and grant proposals.

- **Action 3.1.11.** Work to develop student programs from Sookmyung University, an all-woman university located in South Korea.

- **Action 3.1.12.** Work with Department of Business and Information Technology on new courses, especially in the areas of finance or marketing.
Theme 4: Achieve sustainable growth to insure best return on investment (S&T Theme 3)

**Lever 4.1.** Exercise leadership in sustainability on campus and in the community. (S&T Lever 3.8)

- **Action 4.1.1.** We offer several courses in sustainability and a minor in sustainability, and we will strive to make it more visible.

- **Action 4.1.2.** We offer a graduate certificate in sustainability and we are working with the Mining Engineering Department to make that an entrance to the Master Program in Mining Engineering.

**Lever 4.2.** Promote inclusion and diversity of faculty, staff, and students. (S&T Lever 3.4)

- **Action 4.2.1.** The Economics Department is very focused in insuring diversity. Four of our seven faculty are international are four of our seven faculty are female.

**Lever 4.3.** Where possible, provide development training for Economics Department staff. (S&T Lever 1.2)

- **Action 4.3.1.** We will look for seminars offering administrative support in training and development skills.

**Lever 4.4.** Conduct a comprehensive fundraising campaign to secure private support for identified campus priorities. (S&T Lever 3.9)

- **Action 4.4.1.** Department will work with Development Office to search and identify possible donors to the Economics Department.

- **Action 4.4.2.** We will work with Annual Giving Office to increase the annual phonathon contribution from alumni.

- **Action 4.4.3.** We will increase our outreach to alumni through letters and direct communication.
Lever 4.5. Increase the amount the Economics Department offers in scholarships by 10%, starting in 2015. (S&T Lever 3.7)

Action 4.5.1. Economics Department will increase scholarship amounts for departmental scholarships offered each fiscal year.

Action 4.5.2. Where possible Economics Department will offer scholarships for students engaging in department-sponsored study abroad. The department offered scholarships for the South Africa trip in May 2012.
Theme 5: We will develop and enhance departmental interaction and collaboration with international faculty and institutions (S&T Theme 4)

**Lever 5.1.** We will work with International Affairs and other interested units to expand outreach to international universities, departments and students. (S&T Lever 3.7)

**Action 5.1.1.** As part of the international agreement between Missouri S&T and Mazoon College in Muscat, Oman, the Economics Department will work with the S&T Departments of Business, Computer Science, English, Mathematics, and Psychology to support the corresponding programs at Mazoon College.

**Action 5.1.2.** The Economics Department will work with Dr. Rod Uphoff, Professor of Law at University of Missouri-Columbia (UMC) and Director of South Africa Programs at University of the Western Cape in South Africa and Dr. Jeanie Hofer, S&T Director of International Affairs to maintain close ties among the S&T economics department, the S&T academic community at large, and the faculty and administration of University of the Western Cape in Cape Town, South Africa.

**Action 5.1.3.** In fall semester 2013, the S&T Economics Department entered into a faculty exchange with a member of the Economics Department at University of the Western Cape (UWC). Dr. Ephias Makaudze spent Fall 2013 teaching and doing research at S&T. We will continue our contacts and outreach with UWC in order to facilitate faculty exchange between our two economics departments.

**Lever 5.2.** Develop 2+2 programs or study abroad offerings. (S&T Lever 1.1)

**Action 5.2.1.** We will work with International Affairs to develop a series of study abroad activities, possibly in Oman, South Africa, South Korea or China.

**Action 5.2.2.** Negotiate 2+2 agreements with Mazoon College in Oman and Sookmyung University in South Korea.

**Action 5.2.3.** Work with International Affairs to develop study abroad activities that meet the definition for significant experiential learning activities.