Graduate Student Learning Outcomes
Applied Economics Graduate Program (MS and PhD)

Draft December 3, 2013

1. Process for developing this statement

This statement was developed in consultation with faculty and graduate students in the Applied Economics Graduate Program (AEGP). The program’s goals and outcomes for students and how to assess them were discussed in a meeting of the Graduate Policy Committee, two Department of Applied Economics faculty meetings, and in an open meeting with graduate students. Based on these discussions, a draft statement was written and revised based on feedback from some of the faculty. While much feedback has been gathered, the current version is still considered a draft and has not yet been approved by a vote of the graduate faculty.

2. Educational Goals and Outcomes

The purpose of the Applied Economics Graduate Program at the University of Minnesota is to prepare students for careers that use economic theory and quantitative methods to solve real-world problems faced by business, government and society. Doctoral graduates will typically obtain jobs in academic institutions, research organizations, businesses or government agencies. In these positions, they use their skills and knowledge to shape policy or business decisions and may conduct research, teach, evaluate programs, develop policy, analyze data and/or manage organizations. Masters students either pursue doctoral studies, or find employment as an applied economist or data analyst in the public or private sector. Regardless of the setting, an essential skill is the ability to construct and communicate analytical arguments, economic concepts and quantitative information. A successful applied economist communicates effectively with non-economists as well as economists in both written and oral communications. Graduates of the program collaborate effectively with diverse individuals and with both interdisciplinary and multidisciplinary teams.

Doctoral graduates should have a deep, active knowledge of at least one area of applied economics and will have made an original and significant contribution to the literature in that area. They should be able to design and execute a research program that addresses well-defined and important economic problems. Desired outcomes for doctoral students include:

- Deep understanding and proficiency in economic theory and applied econometrics at the level required to contribute to the discipline;
- Specialized knowledge of a body of literature, including the ability to identify new research opportunities in the field;
- The ability to conceptualize and define the economic aspects of a problem;
- Proficiency in designing and executing a research strategy to answer significant questions having real-world applications;
- The ability to effectively communicate an economic argument both orally and in writing;
- Demonstrate a commitment to active citizenship in the discipline, including engagement in professional service to the profession and society at large;
Commitment to the ethical conduct of research and professional activities;
Contribute to the intellectual community and be able to critically analyze and evaluate one's own findings and give effective and constructive feedback to others.

While masters students do not typically achieve the same depth and breadth of disciplinary knowledge as a doctoral student, they should make an original research contribution to the field and develop critical thinking and problem solving skills. They gain proficiency in the use of quantitative methods, data management and research design by developing a research proposal, conducting the research and writing a Plan B paper or masters thesis. They develop both written and oral communication skills to effectively communicate economic arguments and quantitative information to non-economists.

3. Assessment of Achievement of Student Goals and Outcomes

Doctoral students demonstrate mastery of economic theory and deep knowledge of at least one specialized area by passing two written preliminary exams; one in microeconomics and another in an applied economics field. Completing the applied econometrics core classes (APEC 8211 & APEC 8212) with grades of B or better provides evidence of a student’s knowledge of advanced quantitative methods. We ensure that students achieve the necessary breadth of expertise by requiring them to successfully complete at least 18 course credits in applied economics beyond the required core classes (chosen in consultation with their advisor to support their research interests). The preliminary oral exam and thesis prospectus demonstrate the student’s ability to (i) synthesize the existing literature and identify new research opportunities in the field, and (ii) design a research project that creates new knowledge. Successful completion of a dissertation approved by the student’s final examining committee and passing the final oral exam is evidence of the student’s contribution to knowledge in the discipline.

The development and transformation of students into scholars is supported by a series of seminar classes taken by AEGP students beginning in the first year of the graduate program. The first year seminar (for both MS and PhD students) familiarizes students with the research done by AEGP faculty and covers important topics such as choosing an advisor, selecting a research question, and writing a research proposal. In the second year, doctoral students undertake a significant research paper under the guidance of a paper supervisor and participate in a paper-writing seminar class. Measures of success of this mentoring process include successful completion of second year papers by doctoral students and research papers by master’s students. Presentation of research by students in seminars and at regional and national conferences provides professional experience in communicating their research, and provides feedback to the program on its success in creating scholars. Active participation of students in departmental research seminars and on departmental committees provides evidence of student engagement in the intellectual community and creates opportunities for students to contribute as peers.