17 February 2020

TO: Ananth Seshadri, Professor and Chair, Department of Economics
FROM: Eric Wilcots, Interim Dean, L&S
RE: L&S APC Completion of Academic Program Review: MS-Economics, “Graduate Foundations”

CC: Jenna Alsteen, Assistant Dean, Graduate School
Greg Downey, Associate Dean for Social Science, L&S
Elaine M. Klein, Associate Dean for Academic Planning, L&S
Jocelyn Milner, Vice Provost and Director, Academic Planning and Institutional Research
James Montgomery, Associate Dean for Fiscal Initiatives, L&S
Jennifer Noyes, Associate Dean for Operations and Staff, L&S
Parmesh Ramanathan, Associate Dean, Graduate School

On February 4, 2020, the L&S Academic Planning Council discussed the materials submitted for the mandated five-year review of the named option, “Graduate Foundations,” offered under the MS-Economics program. As you know, such reviews are conducted for new programs five years after they enroll students in order to evaluate whether the program goals are being met and to address any issues best addressed early in the program’s existence. Associate Dean Greg Downey led discussion of the materials you provided for the self-study and the review committee’s report. (You may recall that you did not provide any corrections in facts discussed in the report.)

Council members were impressed by the success of this carefully managed program, which has seen an increase in applications and steady enrollments that have exceeded expectations. The department reaches out to admitted students with mentoring and advice to help them prepare for arrival. This effort, and the orientation, likely contributes to a positive transition into the program (and for most students, to study at a U.S. university) as well as to retention in the program. The curriculum appears to balance well a limited set of required coursework with a modest amount of flexibility via electives, and students complete it at a remarkable rate (94.2%) and in a timely way. Students go on to further academic study (consistent with the original intent of the program) or into industry. Students interested in moving into careers are able to use the services of the Economics Career Development Office, meeting with career advisors and networking with employers.
APC members noted that a variety of direct and indirect measures are used to assess student achievement of learning outcomes, and were pleased to learn that these efforts appear to provide useful information for program improvement, including refinements to the curriculum and to procedures to align students’ areas of research interest with faculty expertise.

The review committee offered a number of suggestions, in the spirit of helping this successful and healthy program grow and improve. We trust that you and your colleagues will consider those suggestions and will adopt those that make the best sense. Of course, you will be in communication with Associate Deans Downey and Montgomery about any changes that might affect resources constraints in other units (for example, if Economics were to make arrangements for the Writing Center to provide non-credit support for these students).

I am happy to report that the L&S APC unanimously approved a motion to consider the L&S portion of this review complete, and to allow this very successful program to continue to be offered. The next phase of review will involve discussion by the Graduate Faculty Executive Committee, which may offer advice from its perspective.
Review Committee Report for the MS-Graduate Foundations Program in Economics
Professor Michael W. Wagner, School of Journalism and Mass Communication (Chair)
Professor A-Xing Zhu, Geography
Professor Bret Shaw, Life Science Communication (GFEC Representative)

Summary of the Activities of the Review Committee
The review committee held an initial meeting to discuss the Self-Study document submitted on behalf of the MS-Graduate Foundations Program in the Department of Economics. We contacted Professor Ananth Seshadri, Faculty Program Director and Chair of the department to schedule meetings with him, Tchai Veu (the MS Program Coordinator), and Kim Grocholski (the department’s Graduate Advisor). After individual meetings with Professor Seshadri, Veu, and Grocholski, the committee advertised a focus group meeting with graduate students. Two students attended the initial meeting. The committee endeavored to hold an additional meeting, hoping especially for more Chinese students to attend (Chinese students make up over 80 percent of the students in the program; none were able to attend the first meeting). Six Chinese students (three in their first year and three in their second year) attended the second meeting. Four other students engaged in a brief email exchange with the Chair of the Review Committee, Professor Mike Wagner. Prof. Wagner also engaged in phone interviews with several faculty in the Department of Economics; most notably Jack Porter and Chris Taber, who regularly teach in the program. After each meeting, the committee members shared notes with each other. Wagner collected the notes and began drafting a document that all committee members contributed to with original writing and editing.

Materials Received (Some initially and some by later request from the Review Committee)
- L&S Dean’s Charge
- Department of Economics Self-Study of the MS-Graduate Foundations Program
- Department of Economics Three-Year GFEC Check-In Report
- Originating Documents of the MS-Graduate Foundations Program
- Several Course Syllabi, both Core and Elective Courses
- Department Surveys of Students in the Program in 2017, 2018, 2019
- Fall and Spring Enrollment Numbers 2013-2018

It is clear that the department uses assessment data to improve the program. The department gathers a variety of data relating to student experiences in the program and engages in assessments in the various courses students take to directly explore whether and how students are meeting the learning outcomes for the program.

The program appears to play a substantive and meaningful role in the department. Senior faculty teach in the program. Second-year students mentor first-year students. Ph.D. students informally mentor some of the students in the program. The department holds informal social gatherings for the group and engages in planned programmatic activity, such as meetings to help students interested in industry careers navigate the job market. The program is directly related to the mission of the department.
The faculty we spoke with are highly supportive of the program. The administrative staff we spoke with are similarly supportive. The program’s success is a point of pride for many in the department. Alumni occasionally engage with MS students, especially those with an industry interest, as well.

**Program Strengths**

*Graduate Student Achievement in the Program*

The major purpose of the program is to train students for Ph.D. work in economics. In general, the program appears to be succeeding at a high level with respect to this central purpose. Students who have completed the program have a far greater likelihood to report that have been accepted into a program to study for a Ph.D. than the typical economics graduate school aspirant. Students who are more inclined for professional careers in industry also found this program beneficial. It also appears to be the case that students pursuing the industry route are generally finding opportunities there after graduation as well.

The Review Committee was provided year-end surveys of 2nd year students in 2017, 2018, and 2019. The surveys showed that about half of the program’s students end up going on to a Ph.D. program in economics. A cursory review of publicly available admissions statistics from top Ph.D. programs in economics reveals the admission rate to be around 10 percent. While not controlling for other potentially relevant factors, this suggests that students who finish the MS-Graduate Foundations Program are five times more likely to be admitted into a Ph.D. program than the average applicant. By this key metric, the MS-Graduate Foundations Program is a success. Stipulating that, though, over the last three years, Figure 1 illustrates that the overall percentage of students who had been accepted into a Ph.D. program is declining while the percentage of students who had already accepted industry offers has been rising.

**Figure 1: Post-Graduation Plans for MS-Graduate Foundations Cohort**

![Figure 1: Post-Graduation Plans for MS-Graduate Foundations Cohort](image)

*Source: Surveys of MS-Graduate Foundations 2nd year Students*

However, this decline does not suggest that the program is less successful over time. Comparing the percentage of students who want to pursue a Ph.D. to those who were accepted into a Ph.D. program at the time of the survey has been relatively steady over the same time period. This reflects Professor Seshadri’s impression that an increasing number of students are coming into the program interested in industry work as compared to pursuing a Ph.D. Other faculty did not
necessarily share that impression, though they have less contact with the whole cohort of students than Professor Seshadri does.

The remaining students, not captured in the figure, are either still applying to Ph.D. programs or continuing to seek industry employment. It does not appear as though the department has another mechanism to track their success beyond the year-end graduation survey.

**Program Growth**

After a year to get started, the program has enjoyed healthy numbers. The program grew from 2013 to 2016 and has held fairly steady in overall size since then. Faculty and staff agree that the program ought not to get much larger given the current state of resources required to administer the program effectively. In other words, the department appears satisfied with the growth of the program to date and believe they are in a healthy position for the foreseeable future.

**Figure 2: Program Enrollment, 2013-2018**

![Program Enrollment, 2013-2018](image)

Source: Department of Economics

**Graduate Student Perceptions of the Program**

The review committee held two formal focus group sessions with graduate students in the MS-Graduate Foundations Program and offered to have private conversations with any additional interested students. The committee also reviewed the top-line results of surveys that the Department of Economics administered to students in the program in 2017, 2018, and 2019.

Both 1st and 2nd year MS-Graduate Foundations students had many positive things to say about the program. Every 2nd year student with whom we spoke said that they would, knowing what they know now, enter the MS Graduate Foundations Program again. Areas of satisfaction included the econometrics training, the fact that the department generally has distinguished full professors teaching in the program (as compared to other MA and MS programs that tend to have adjunct professors, lecturers or junior faculty teach the junior graduate students), the ability to
produce a research paper suitable to use as a graduate school writing sample in the 2nd year, networking opportunities, and a sense that help, if needed, was accessible to them.

Students answering open-ended questions in the yearly surveys conducted by the department repeatedly praised the Program Director, the Program Coordinator, faculty, networking opportunities with faculty and alumni, econometrics training and the curricular design.

Focus Group participants articulated their appreciation of the intense rigor of the three-seminar econometrics sequence. They also expressed that Program Coordinator Tchai Veu was available to answer their questions about the program. Students also agreed that Professor Seshadri made efforts to engage with students, especially via informal networking events held a few times a year.

The surveys of the 2nd year students in the program, see Figure 3, revealed near universal contact with the Program Coordinator, Tchai Veu, as well as regular contact with faculty outside of class. Despite the size of the program, Professor Seshadri personally met with roughly two-thirds of the 2nd year students at least once and about 40 percent of students two or more times.

**Figure 3: Percentage of 2nd Year Cohorts That Met At Least Once With Various MS-Graduate Foundation Program Personnel**

![Bar chart showing percentage of 2nd year cohorts meeting various personnel](chart.png)

**Source**: Surveys of MS-Graduate Foundations 2nd year Students

*Career Advisor not asked about in 2017.*

General areas in which Focus Group participants expressed a desire for something different than they are getting in the program included aspirations to be research assistants, a more structured mentoring relationship between 1st and 2nd year students, large class and cohort sizes, and – for Chinese students – more routinized opportunities to practice English. Student surveys raised similar issues, though many students took care to reiterate their satisfaction with the program.

Some 1st year students in our focus groups expressed frustration about a lack of clarity with respect to how they would be mentored by 2nd year students. This surprised some 2nd year students, who remarked that once a student was assigned a mentor, the expectation was that the 1st year student would reach out to the mentor with any questions or problems. 2nd year students noted that the instruction they receive is to contact their mentees on email and wait to see if the
mentees need to engage with the mentors. Some 2nd year students said that they took it upon themselves to contact their mentees and meet with them proactively, but noted that this was not typical behavior.

Some 1st year students felt that the regimented nature of the 1st semester seminar requirements should be relaxed in favor of a more a la cart program. 2nd year students generally felt that there was enough curricular choice in the 2nd year of the program and expressed a gratefulness to have had the thorough econometrics and theoretical training in the first year, before Ph.D. graduate applications would be due in the fall of the 2nd year.

One 2nd year student suggested the program was too focused on microeconomic and should have a more even balance between microeconomics and macroeconomics.

**Faculty Perspectives on the Program**

Faculty we spoke with who teach in the program expressed pride in the program’s quality and success.

In its present form, the MS-Graduate Foundations Program is highly dependent upon the department chair, Professor Ananth Seshadri. Professor Seshadri was virtually universally praised for the success of the program, the effort he puts into the program, the program’s trajectory and the benefits the program brings to the entire department. Even so, the program does not have a clearly outlined governance process. Faculty who teach in the program noted that the administration of the program is informal, with Professor Seshadri seeking out input from involved faculty on an as-needed basis. This governance strategy appears to be appreciated by the faculty who regularly teach students in the program.

**Departmental Assessment of the Program**

The program faculty have taken up different learning outcomes in different years for assessment purposes (see the self-study provided by the department). The vast majority of students have been deemed to be meeting the program’s learning outcomes. The assessment plan involves examining course evaluations and talking with relevant faculty about the students’ major research project performance. The assessments also led the program faculty to conclude that some students need more math preparation (something echoed by some students in the program) but they have not gotten beyond the discussion stage with respect to most of the remedies for that issue.

**Overall Assessment**

In general, the MS-Graduate Foundations program is a healthy one. A high percentage of students are moving on to a Ph.D. program, as intended, and another subset of students are moving directly into industry work. Enrollment is strong, the students generally are enjoying their experience, the faculty who participate have bought in and the department has hired additional staff to help accommodate the strain the program might have otherwise placed on the original staff. Students have access to faculty and staff when they need it. They also have a student mentor, though they do not always know how to operationalize that relationship.
It may be the case that more students are entering the program with an eye on the program’s secondary purpose of preparing students for industry positions, but it is too soon to tell whether the slight uptick in industry-bound students in 2019 is a blip or a trend. Moreover, despite the program’s size, students are finishing in a timely manner (Median years to degree=1.72, the maximum is 3.01).

The students report some cliques, largely on the basis of country of origin, but generally describe their cohorts as satisfied with the program and delighted with the quality of the faculty teaching in the program.

There is not a clear governance structure in the program. It is largely dependent upon the program’s director, who is also department chair. There are several faculty who play an effective “kitchen cabinet” role for the program director, but it is not clear what would happen to the program if Prof. Seshadri elected to stop directing the program, left the university, etc.

**Specific Recommendations for the Future**

The MS-GF Program is a successful, healthy program. Of course, even successful and healthy programs can grow and improve. To that end, the Review Committee has a small number of recommendations for the Department of Economics to consider. We recommend:

- The Department of Economics formally create a small committee of faculty and staff to administer the program. We recommend that this committee have a process for selecting a faculty director of the program and include at least two other faculty members to help create institutional memory beyond the program director.
- The program should explicitly direct ESL students to the Writing Center
- Seminar Professors consider using lecture capture to post videos of their lectures online, which particularly should help ESL students have more opportunities to engage with the lecture material.
- Program faculty should develop the remedial math 0-credit option they have discussed (see the department’s self-study) as a way to help bring struggling students up to speed early on in their matriculation.
- 2nd year student mentors should be directed to explicitly email their 1st year mentees before the end of the first week of classes in the fall semester in order to set up an initial meeting sometime during the first month of the semester. The program should find ways or resources to encourage more contacts between first-year students and second-year students.
- The program should keep in touch with alumni via web-based surveys to track their progress in their Ph.D. programs/industry positions.